CHANGES IN THE MARITAL RELATIONSHIP WHEN ONE SPOUSE HAS BEEN DIAGNOSED WITH TERMINAL CANCER

BY

B. MEREDITH JOHNSON

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1988

This dissertation is dedicated, in memoriam, to

Dr. Roy Ivan Johnson

ACKNOWLEDGMENTS

The supervision and guidance of my committee chairman, Dr. Larry Loesch, was extremely valued and appreciated. Appreciation also is extended to the other members of my committee, Drs. Harry Shaw, Harold Riker, and Janet Larsen, for their involvement, time, and suggestions. I especially wish to thank Dr. Larsen for 30 years of friendship and support. The involvement of Dr. Margaret Fong, who initially served as chairperson of my committee, also was appreciated.

I am profoundly grateful to Dr. Bruce K. Stechmiller who was primarily responsible for facilitating access to a great number of other doctors and their patients and from whom I had a most instructive internship. I admire and respect his compassion, humanity, and genius. I also appreciated the participation of all the doctors who were involved in this study, particularly Drs. Robert deW. Marsh, Ward Noyes, and Norman Anderson.

My deepest appreciation is extended to those cancer patients and their spouses who participated in the study and I hope that their experience will be of benefit to future cancer patients and their spouses.

Finally, I wish to extend my heartfelt thanks to my husband, Mark Aaron Smith, my mother, Dr. Irmgard Johnson, and my daughters, Andrea and Alaina D'Antonio, for their unwavering support and encouragement.

TABLE OF CONTENTS

		Page
ACKNOWLEDGMENTS		iii
ABSTRACT		vii
CHAPTERS		
I	INTRODUCTION	I
	Statement of the Problem	10
	Focus	13
	Purpose of the Study	14
	Research Questions	14
	Scope of the Study	15
	Definition of Terms	17
II	REVIEW OF THE LITERATURE	19
	History and Trends in the Literature on Terminal Illness	20
	Impact of Terminal Illness	22
	Impact on the Individual	22
	Impact on the Family	24
	Terminal Illness as a Crisis	27
	Marital Relationships	29
	Change and Adjustment to Change	29
	Assessment of the Marital Relationship	33
	Marital Relationship Theory	37
	Changes in the Marital Relationship During Terminal Illness	39
	Summary	43
III	METHODOLOGY	45
	Population	45
	Sampling Procedure	46
	Relevant Variables	47
	Demographic Variable	48
	Marital Satisfaction	48

Marital Satisfaction Discrepancy 49
Perceived Needs 50
The Researcher 51
Data Collection Procedures 52
Research Questions 53
Data Analysis 60
Methodological Limitations 63

IV RESULTS 65

V DISCUSSION 87

Generalizability Limitations 87
Evaluation of Research Questions 88
Interpretations 91
Implications 94
Recommendations 95
Summary 97

APPENDIX

INFORMED CONSENT 99

REFERENCES 101

BIOGRAPHICAL SKETCH 107

Abstract of Dissertation Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

CHANGES IN THE MARITAL RELATIONSHIP WHEN ONE SPOUSE HAS BEEN DIAGNOSED WITH TERMINAL CANCER

by

H. Meredith Johnson

April, 1988

Chairman: Larry Loesch, Ph.D.
Major Department: Counselor Education

This descriptive study was an investigation of marital satisfaction and perception of needs in couples in which one member had been diagnosed with terminal cancer. The sample consisted of 25 couples of which 11 were female patient couples and 14 were male patient couples. The Marital Satisfaction subscale of the Dyadic Adjustment Scale (DAS) and the Fundamental Interpersonal Relations Orientation Marital Attitudes Evaluation (FIRO MATE) were administered to all subjects. Marital satisfaction, marital satisfaction discrepancy (i.e., the difference between spouses' scores), and perception of needs discrepancy (i.e., the difference between one partner's stated needs and the other partner's perception of those needs) were correlated with the length of time since diagnosis of terminal illness. The sample also was divided into two groups based on patient gender and the differences between the respective

independent correlations were examined. In addition, marital satisfaction discrepancy was correlated with misperception of needs. Significant ($p<.05$) results were found in the relationships between misperception of patient need for control behavior and length of time since diagnosis, in differences between gender groups regarding misperception of patient needs for control feelings relative to length of time since diagnosis, and in differences between gender groups regarding misperception of spouse needs for inclusion feelings relative to length of time since diagnosis. It was concluded that the degree of marital satisfaction and marital satisfaction discrepancy remain stable during terminal illness. It also was concluded that terminal illness is neither associated with increased nor decreased marital satisfaction and that the degree to which spouses differ in their perceptions of the degree of satisfaction in the marital relationship is unaffected by terminal illness over time. It also was concluded that marital satisfaction discrepancy is not related to discrepancies of perceived needs. Thus, although some relationship needs are increasingly misperceived over the course of terminal illness, discrepancies in how the spouses perceive the overall satisfaction of their marital relationship is not associated with these changing misperceptions.

CHAPTER I
INTRODUCTION

Death is as natural a human event as is birth. Whether death is caused by old age, by illness, or accident, it is a universal event in family life. Further, the circumstances surrounding a death dictate to some extent the type and degree of impact upon the family system. For example, the natural death of an elderly person has a different impact in the family than does the death of a child or young adult. Relatedly, the death of a family member through accident or illness triggers a crisis in the family causing it to enter a state of disequilibrium. In the case of accidental death, there is no opportunity to make preparations which will facilitate necessary adjustment to the loss, nor for plans for the redistribution of the duties and responsibilities of the deceased in the family unit. Likewise, when a family member dies after a terminal illness, the event has a profound affect upon the family even though the death was expected (assuming the family had been informed of the terminal status of the patient) and despite the fact that there had been some opportunity to make plans for the future functioning of the family (Geyman, 1983).

The impact from the death of a family member by terminal illness derives from the fact that it is a crisis which follows

upon the heels of another crisis, the terminal illness itself. It is the impact of terminal illness, because of its significance as a prelude to death, that is the focus of this study.

The nature and degree to which terminal illness affects the family are thought to be associated with factors such as the roles and functions of the patient within the family system and the developmental stage of the family (Gordon & Rooney, 1984; Vess, Moreland, & Schwebel, 1985-86). For example, the impending loss of a young mother/homemaker/"secondary breadwinner" would have great impact upon the family because it is not only losing that human being but also the person who performs many mothering and homemaking duties and contributes to the family's income. Similarly, the impending loss of a 2-year-old child deprives the family of that individual member as well as of the functions that the child serves within the family (e.g., as a focus for parental attention and affection). Whether the family is young or in postretirement, when confronted with a terminal illness the family is called upon to engage in various adaptive strategies appropriate to its developmental stage in order to cope with what may be viewed as an important developmental crisis in the family life cycle.

The effects of terminal illness on the family are similar to the effects of other developmental crises. That is, the family in crisis is thrown into a state of instability and disequilibrium. At this time, the family must adapt by utilizing new behavioral strategies and employing new coping

mechanisms. Adequate adjustment to crisis requires that certain conditions be met (Jacobik, 1984). For example, accurate perception of the facts pertaining to the event is necessary. Further, adequate methods by which feelings are managed must be employed, effective coping mechanisms must be discovered and utilized, and finally, there must be adequate social support available and of which appropriate use is made.

A crisis is, by definition, of short duration, lasting for perhaps 2 weeks. Therefore, a terminal illness which is of some duration (i.e., longer than 2 weeks) may be viewed as a series of crises. As the patient's condition worsens, requiring new types of palliative treatments or the decision to discontinue such treatments, new adjustments must be made to accommodate the changing situation. The family system also must interface with health care systems which have their own particular rules of behavior, adding an additional element to the crisis of terminal illness.

Another factor unique to this crisis is the dependent role forced upon an adult who is terminally ill. It is difficult for the ill person to become increasingly less able to make his or her customary contributions to family life and to rely on others to perform for him or her the self-care activities which adults are accustomed to doing for themselves.

According to Parson's (1964) concept of the "sick role" in our society, the individual who is ill is not responsible for his or her condition, is exempt from customary social roles,

and is under obligation to seek help and coopersta with others toward his or her recovery. He or she must comply with prescribed treatments. Parsons (1975) suggested that in the evsnt of incurable illness, the patient is expected to "manage" the condition in order to be able to continue to perform expected social roles.

Another parspectivs is provided by Moos and Tso (1977) who presented physicsl illness as a major life crisis. Sevan adaptive tasks were provided in this model. Tha first three were illness-related and the final four were termed "generel" and relsted to the crisis aspect of the illness. The seven tasks sre (s) dealing with pain and incapacitation, (b) dealing with tha hospitsl environment and special treatment procedures, (c) developing sdequste relstionships with the professional staff, (d) preserving s ressonable smotionsl bslsnce, (s) preserving s satisfactory self-image, (f) preserving relstionships with fsmily snd friends, and (g) preparing for sn uncertain future. Parsons (1975) and Moos and Tsu (1977) heve made it apparent that in the face of the crisis of terminal illness sdaptation is difficult st best.

Whils comparstively little research exists which documents the impact of terminal illness upon family functioning, it can be ssan from the litersture that terminsl illness in s family causss changes on three levels: (s) in the family system, (b) within the marital dyad, and (c) on individual lsvels. Similarities exist st all three levels. The most frequently

mentioned topics are roles, closeness, communication, specific emotions, and somatic complaints. These topics are discussed as they pertain to the entire family, the marital dyad, and the individual.

Families have been found to resort to terminal illness with an increase in conflict, role confusion, and isolation or over-dependency (Cooper, 1984; Hart, 1986-87; Wallisch, 1985). Attempts to preserve the family structure, in an effort not to accept the reality of the death, are frequently made (Hare-Mustin, 1979). In addition, entire families may mirror the emotions of the troubled patient (Heimlich & Kutscher, 1970) or may experience feelings of detachment and separation (Hackett & Weisman, 1977).

Although there is consensus concerning the extreme stress which terminal illness places on the family and its component parts (e.g., children, siblings, spouse, or parents), the effect of terminal illness on the marital dyad in particular has received very little attention. Within the marital dyad, problems related to communication are frequent (Cooper, 1984; Hinton, 1981; Stedeford, 1981). Commonly, there is a reluctance to discuss the impending death and its consequences as well as hesitation to express feelings concerning the exegeses of the situation surrounding the terminal illness.

Issues relevant to interpersonal closeness and distance are salient for couples at this time (Cooper, 1984). An approach-avoidance conflict concerning involvement at the time

of terminal illness has been noted by several authors (e.g., Stedeford, 1981; van Wormer, 1985). Evidently, married couples experience the distance or degree of closeness between them as in a state of flux and the partners experience feelings of ambivalence concerning the issue of closeness, although "closeness" has been designated as a need for spouses of the terminally ill (Rampe, 1975). Further, not only are there ambivalent feelings about closeness, but the perceptions of spouses concerning partners' desires for closeness may be incorrect. In addition, difficulties in adjusting to new role demands are commonly present (Stedeford, 1981). It also has been noted that spouses frequently have difficulty adapting their former behavior patterns in terms of appropriate new role behaviors (e.g., dominance and dependence).

Early descriptive accounts of marital reactions to terminal illness focused almost exclusively on the emotional reactions of the two separate individuals in the marital dyad (Kubler-Ross, 1975). The individual emotional reactions which have been cited most commonly are guilt, anger, fear, and anxiety (Stotar, 1980). Guilt is probably the most discussed emotional reaction and is cited as being a common reaction for both spouses (Hart, 1986-87; Rampe, 1975; van Wormer, 1985; Viney & Westbrook, 1986-87). Guilt apparently often serves as a mediating affective response to feelings of helplessness and hopeleasness, but is frequently expressed as anger (Heimlich & Kutscher, 1970).

Feelings of low self-esteem on the part of both spouses also are frequent during terminal illness and may be caused by the helplessness and lack of felt competence associated with the inability to exert the desired amount of control or by felt anger turned inward (van Wormer, 1985; Viney & Westbrook, 1986-87). Another factor related to low self-esteem is the insecurity sometimes exhibited by a terminal spouse about maintaining the interest of the survivor spouse (Stedeford, 1981).

Feelings of emotional dependency among family members and between spouses may increase when one spouse is terminally ill (Hampe, 1975; Stedeford, 1981). This does not, however, necessarily increase family cohesion, nor the probability that family members (or spouses) are helpful and supportive of one another's emotional pain (Hackett & Weisman, 1977).

Once it was established that guilt, anger, fear, and anxiety were generally present and problematic, research attention in the area of terminal illness turned to describing couples' needs and roles as they related to the problems faced by a couple when one member was terminally ill. Spouses of the terminally ill reported the need for closeness (physical proximity), the need to feel helpful, and to participate in some aspects of the patient's care (Hampe, 1975). They also reported the need for comfort and support from family members. Family members, however, frequently discouraged the "survivor" spouse from expressing his or her feelings and the functions of family members sometimes appeared to distract that spouse from grieving

and to encourage stoic acceptance (Bsider, 1977; Checkryn, 1984). The situation surrounding the terminal illness often serves to thwart the meeting of felt needs on the parts of both spouses. This is counterproductive because coping with adaptive tasks to meet the new needs of family members is necessary for the facilitation of functional system reorganization.

The roles of both spouses must necessarily change as illness forces the patient to become more dependent. This sometimes causes competitive conflicts when the patient has trouble relinquishing to other family members (e.g., the spouse) the responsibilities which helped to define and maintain his or her role and function in the system. New decisions must be made concerning allocation of duties and responsibilities in order to keep the family functioning. When accomplished successfully, this system of shared responsibility and redefined roles reduces competitive conflicts and discomfort about power and control for the married couple (Geyman, 1983).

The most recent focus of attention in the research on terminal illness as it effects the marital dyad is on communication and the effect different types of communication behaviors have upon the subsequent (i.e., postdeath) adjustments of the survivors. One of the causes of a couple's failure to cope with terminal illness is thought to be dysfunctional communication behavior (Stedeford, 1981). Communication behaviors between spouses, when one of them is terminally ill, also frequently run counter to what is considered by many experts to be optimum

marital interaction. For example, it is common for the couple to refrain from discussing dying at all (Hinton, 1981).

Johnson, Schalaksmp, and Garrison (1956) made two statements fundamental to understanding of the nature of communication. The first was, "bear in mind that communication is always a partnership" (p. 1). It is therefore meaningless to study communication in any other context. The second was, "pattern is fundamental in all expression" (p. 38). This idea is basic to the theoretical underpinnings of this study and will be discussed within the context of the interactional approach.

In more recent studies of couples where one person was terminally ill, both spouses typically were not included in the research samples. Therefore, such an approach renders them studies of <u>individual</u> reactions and perceptions rather than studies of impact of terminal illness on the marital dyad as an entity or system in und of itself. Further, there has not been an attempt to examine changes in the marital relationship which take place from the time of diagnosis to time of death. One study (Gullo, 1974) was an investigation of the psychological, psychosomatic, and somatic reactions of women, over time, to the anticipated deaths of their husbands from terminal illness, but no information was collected on changes in the marital dyad. Some studies involving the distress suffered by the married couple when a child is terminal have involved measures of individual parental changes, but changes in the functioning of

the marital dyad as a single unit of interaction had not been explored.

Statement of the Problem

The specific issues concerning how a terminally ill person and his or her mate interact during the time of dying merit special attention. In order to describe marital changes and adjustments during terminal illness, a model for conceptualizing the marital relationship is needed. There are currently three models which could be employed and which would be relevant for this purpose: systems theory (von Bertalanffy, 1950); social exchange theory (Parsons, 1951; Barbin, 1954; Thibaut & Kelley, 1959); and the interactional approach (Jackson, 1968; Watzlawick & Weakland, 1977).

This study is couched in the interactional approach espoused (primarily) by Haley (1963) and Watzlawick, Weakland, and Fisch (1974). Emphasized in this approach are communication and rules as central issues effecting the marital dyad and encompassed are many of the tenants of systems and social exchange theories. The interactional approach derives from general systems theory an emphasis on the importance of information in regulating interpersonal interactions. Communication is the medium through which people exchange overt, as well as covert, information about their relationships. Reinforcement exchanges are seen as vehicles for bargaining. Shared beliefs from overt and covert interpersonal communication

form the basis for the rules for the processes by which people interact.

Clinical application of theory is a major focus for those who adhere to the interactional approach (Stuart, 1980). The theory is based on clinical observation and implemented for the creation of therapeutic change in relationships. The variables important to the theory (e.g., communication behaviors) are considered to be the same variables through which change is achieved. It was fitting that, because data collected in this study may be used to design counseling interventions, an approach which emphasizes clinical application be used.

Communication, rules, and roles, in addition to being central to the interactional approach, are also among the variables of interest which have been evident in the literature on terminal illness (Baider, 1977; Hart, 1986-87; Hinton, 1975). The communication behaviors of couples are of particular interest because it has been found that "open" communication between spouses is associated with better subsequent adjustment for the surviving spouse (Doshan, 1985). The content and process of communication as well as the perceptions of each individual concerning the other's emotional state, based on verbal or nonverbal behaviors, are of importance when examining the marital relationship during terminal illness. Conper (1984) found that discrepancies existed in perceived communication behaviors and closeness for the terminal patient and spouse. Relatedly, Checkryn (1984) found that when cancer patients and

their spouses talked about the disease, they frequently did not share accurately each other's meaning.

There also has been interest expressed in the field of thanatology in regard to behavioral and emotional adjustments as they relate to terminal illness. Adjustment to changing role demands is part of behavioral adjustment. Cooper (1984) noted that difficulties in behavioral, emotional, and role change adjustment have an impact not only upon the family system but also upon the medical treatment of the patient. Finally, closeness is important because it is known that there is ambivalence concerning closeness and distance for couples undergoing such a crisis. This ambivalence is thought to produce considerable guilt (van Wormer, 1985).

The demographic variables most frequently reported in the literature as being related to the natures of marital relations during terminal illness are the age and gender of the patient (Hart, 1986-87). The age and gender of the patient also are related to his or her position (i.e., role and function) within the family system. The gender of the patient is salient because it has been suggested that male spouses of female patients have more difficulty talking about their feelings with, and discussing the terminal illness with, their mates (Cooper, 1984).

The degree of marital satisfaction also has been considered an important variable. Hinton (1975) found that marital satisfaction had a positive relationship in the adjustment of the patient to impending death. There was less depression,

anxiety, and anger present in the patient if he or she reported having had a satisfying marriage.

Although marital relationships can be expected to change during the course of a terminal illness from the time of diagnosis, the nature of the changes had not been examined empirically. Further, when interpersonal behaviors have been identified, they had not been compared to like behaviors at different points in time. Thus, it was not known how terminal illness impacted on the marital relationship in terms of changes over time. For example, although it was known that communication difficulties are usually present in a family with a dying member, it was not known if communication patterns and behaviors between spouses change during the illness. If communication between spouses does change, it also was not known to what degree or in what way it changed. What was known about the marital relationship during terminal illness was, by and large, referent to one limited time period (e.g., at the time of an interview). It was also inferred from studies of individuals. While researchers who concentrate on one point in time provide the basis for ideas for possible counseling issues, they do not describe fully the process by which a couple adapts and modifies the relationship during terminal illness.

Focus

Investigated in this study were specific marital relationship variables in regard to change during the course of a spouse's terminal cancer. Cancer was chosen as the specific

type of terminal illness to which this research was confined. Stresses and interpersonal difficulties encountered during terminal illness are specific to different diseases, and therefore cancer imposes its own variety of stresses upon the relationship (Cooper, 1984). The variables pertaining to the marital relationship on which this study focused were marital satisfaction, marital satisfaction discrepancy, and perceptions of needs as they related to changes within the period following diagnosis of terminal cancer. The gender of the patient was the demographic variable examined.

Purpose of Study

This study had two purposes. The primary purpose was to identify and describe changes in the marital relationship in terms of marital satisfaction, marital satisfaction discrepancy, and perceptions of needs in the period following the initial diagnosis of terminal cancer. The second purpose was to explore possible relationships among these specific relationship changes as well as the demographic variable of patient's gender.

Research Questions

Investigated was the marital relationship when one spouse was diagnosed with terminal cancer. The study was designed to answer the following general questions. (The specific research questions addressed in the study are presented in Chapter III.)

1. Can changes in the marital relationship following the time of diagnosis be identified in respect to marital

satisfaction, marital satisfaction discrepancy, and each spouse's perceptions of needs?

2. Do patterns of change in marital satisfaction, marital satisfaction discrepancy, and perceptions of needs differ on the basis of the patient's gender?
3. Is perception of interpersonal need related to marital satisfaction discrepancy?

Scope of the Study

Cancer is a major health problem in the United States. Approximately 30% of Americans now living will be diagnosed as having cancer within their lifetimes. In addition, three out of every four families will have a family member diagnosed as having cancer (Cooper, 1984). Most importantly here, the diagnosis of cancer impacts on a variety of family dynamics. Therefore, this study was a beginning for a possible series of studies designed to examine marital relationship changes during terminal illness and how those changes relate to demographic and family characteristics and behaviors. Professionals who deal with terminal cancer patients and their spouses could use such a basis to guide efforts to assist those couples with their attempts to make successful adaptations to the illness.

Insight into the change process is facilitated by placing emphasis on what happens over a period of time rather than what exists at a single point in time. Therefore, the adaptation process was examined in terms of relationship variables as it coexists and intersects with the disease process. Couples are

frequently given an outline of what they may expect from the process of the disease as well as ways of making physical accommodation to the disease as it progresses. However, concomitant relationship changes typically are not addressed. Therefore, it is not surprising that many couples with a dying spouse feel that their psychological needs are not met by members of the medical profession.

Doctors, nurses, social workers, and mental health professionals frequently not only find it personally stressful but also are often less than well-prepared to cope effectively with their patients in terms of the psychological, interpersonal dimensions of terminal illness. The couple containing a terminally ill member faces similar problems of being ill-equipped and anxious. They frequently have no place to turn for assistance with the new and difficult set of interpersonal problems they must face.

It is in the best interests of the medical profession that families cope as effectively as possible with terminal disease. Positive family dynamics are known to have an impact upon the successful implementation of the medical treatment plan. The functioning of the marital relationship at this time is of importance not only in its own right, but also because of the manner in which the couple copes with the disease from a medical standpoint. The interactional characteristics of the couple's relationship also have an effect on how the couple deals with

the other systems (e.g., hospital-medical) with which it comes into contact.

It has been documented that many marriage and family therapists are ill-prepared for and have misgivings about doing therapy with a family with a terminal member (Stephenson, 1981). One reason for the ill-preparedness is the dearth of material from which to learn about family dynamics in intersection with terminal illness. However, each new piece of information brings medical and mental health professionals closer to being able to offer effective assistance to couples in this difficult situation. The need for such assistance is clearly present and such assistance has been called for by many researchers and practicing professionals.

Definitions of Terms

In order to allow for effective understanding of this dissertation, the following definitions for major terms used are provided.

Marital satisfaction is used here as defined by Spanier (1976) for the Dyadic Adjustment Scale. Marital satisfaction is contentment with and commitment to the marriage. The marital satisfaction score is derived by averaging the DAS scores of both spouses to obtain one marital satisfaction score per couple.

Marital satisfaction discrepancy is defined as the difference between spouses' perceptions of their marital

satisfaction and is represented by the numerical difference between the DAS scores of patient and spouse.

Needs are used here as defined by Schutz (1976) for the FIRO MATE Scale. Needs are stated desires for inclusion, control, and affection.

Perceptions are used here as defined by Schutz (1976) for the FIRO MATE Scale to indicate what one spouse thinks the other spouse wants from him/her. Scores represent how the respondent perceives the needs of the spouse.

Time of diagnosis is the point in time at which the physician indicates to the patient that the disease will, in all probability, lead to death and that any further treatments will be for the purpose of symptom alleviation or temporary life extension.

CHAPTER II
REVIEW OF THE LITERATURE

The review of the literature in this chapter is divided into four sections: (a) history and trends in the literature on terminal illness, (b) the psychological impact of terminal illness, (c) marital relationships, and (d) changes in the marital relationship during terminal illness. Reporting the history of and trends in the literature on terminal illness has the function of providing a conceptual framework. The section on terminal illness is subdivided into two subsections, one that is focused on terminal illness as it affects the individual and the family and the other on terminal illness as a crisis. The section on marital relationships contains a discussion of change and adjustment to change, assessment of the marital relationship, and a description of how the marital relationship is viewed according to the theory adopted for this study. Variables influencing the marital relationship and assessment of those variables also are addressed in the theory section. Finally, the section on changes in the marital relationship due to terminal illness contains a discussion of literature from which assumptions regarding these changes can be made.

History and Trends in the Literature on Terminal Illness

Interest in the impact which the process of dying has on individuals was a logical extension of the work done on dysfunctional reactions to death. Freud's (1917/1957) treatise on "Mourning and Melancholia" was the historical foundation on which much of the current thinking and clinical mental health practice rests. Although few purely psychoanalytic writers and researchers are to be found today, they, as well as cognitive behaviorists and systems theorists, trace their roots directly to Freud. Ackerman (1966) was the first to write of family systems theory as it pertains to death and dying. The works of authors such as Minuchin (1974), Bowen (1978), and the Milan group (Selvini-Palazzoli, Cecchin, Prata, & Boscolo, 1978) derive from the work of Ackerman. Kubler-Ross (1974) maintained the intrapsychic position and is the modern "mother" of psychodynamic works on death and dying, although she is frequently cited as a source regardless of the theoretical orientation of the authors. The cognitive-behavioral point of view traces its origin to Beck, Rush, Shaw, and Emery (1979) and Ramsay (1979) who applied it to the area of death and bereavement.

The literature in this field usually has been divided into two areas: studies of postdeath functioning (i.e., the bereavement process) and studies of illness and the dying process. Death and dying has been either treated as a subject to be examined or studied as a means of finding solutions to specific

problems. For example, some studies have simply been descriptions of the feelings reported by a patient and his/her spouse or have been examinations of those feelings in order to design more effective [nursing] interventions on an oncology ward.

The literature on terminal illness evolves primarily from the disciplines of psychology, medicine, theology, and sociology. The sociological literature generally has been concerned with demographic characteristics, societal behaviors and changes, and the historical aspects of how cultures treat the issue of death and dying. The disciplines of medicine and theology have provided most of the literature on ethical concerns about terminal illness, although thanatologists and philosophers also have made contributions in the field of ethics (Zucker, 1988).

Theories underlying psychological writings about death and dying are diverse, but six theoretical frameworks predominate: family systems, behavioral, cognitive, psychodynamic, ecological, and general systems theory. Many writers have adopted a combination of theories which makes expansion on their work difficult for those adhering to a single, specific theory of human behavior. In general, the literature on death and dying has been interactional. However, recently more writers grounded in family systems theory have been making contributions and have increasingly come to view the family as an important focus for attention and research.

Despite the current trend toward viewing terminal illness more systemically, the literature of the past 15 years has been overwhelmingly individualistic in nature. Thus, the preponderance of the early writings in this "modern" era has focused on individual intrapsychic processes.

Impact of Terminal Illness

The literature in the field which focuses or touches upon the impact of terminal illness on the marital dyad stems either from literature covering the effect of terminal illness on the family or on individuals. Further, the literature on families is an outgrowth of studies of individuals' reactions to terminal illness. In line with systemic thinking, the studies involving the impact of terminal illness on the married couple stem from the premise that the marital dyad is an important subsystem, affecting greatly the functioning of the family system. These studies also have been a direct outgrowth of individual studies of spouse's reactions to the terminal illness of their mates.

Impact on the Individual

Kubler-Ross (1975) was the most influential single force in bringing the psychosocial aspects of terminal illness to public attention. Taking an individual, psychodynamic perspective, she postulated five stages through which the terminal patient progresses, based on her interviews with dying patients: (a) denial, (b) anger, (c) bargaining, (d) depression, and (e) acceptance. Although it has not been substantiated that patients experience these discrete stages in the manner

suggested by Kubler-Ross (Weisman, 1972), her contribution to the field, in terms of providing a framework for attempting to understand the impact of terminal illness as well as providing the public with the material from her interviews, has been enormous. Her work gave professionals a starting place. Of course, the subject had been addressed before Kubler-Ross wrote about it, but the earlier studies had been done by members of the medical profession and published in medical journals. Such publications were few and far between, thus having much narrower influence than did the work of Kubler-Ross.

While psychological problems and behavioral maladjustment as well as reports of somatic distress have been considered, the primary focus in the literature has been on individual reactions to dying. Guilt, anger, fear, and anxiety are thought to be the most prevalent emotions evidenced (Stoter, 1980), with guilt being the emotion most commonly discussed (Hampe, 1975; Heimlich & Kutscher, 1970; van Wormer, 1985; Viney & Westbrook, 1986-87). Low self-esteem resulting from helplessness and lack of felt competence also have been found to be common (van Wormer, 1985; Viney & Westbrook, 1986-87). Binger (1984) and Geyman (1983) found that individuals often evidence depression and other psychological symptoms serious enough to warrant professional attention as they attempt to cope with an impending death. Similarly, Gullo (1984) found that wives of terminal patients evidenced somatic and psychosomatic difficulties. Children also have been found to exhibit behavioral maladjustment (Fare

Muetin, 1979) and suffer developmentally and emotionally (Naysmith, Hinton, Meredith, Marks, & Berry, 1993) in response to the terminal illness and death of a loved one.

Impact on the Family

Conflict, role confusion, and isolation or overdependency have been found to occur as family responses to terminal illness (Cooper, 1994; Hart, 1986-87; Wellisch, 1985). The particular difficulties facing a family in its efforts to reorganize in order to make a functional adjustment are influenced by the role and function of the patient within the family system (Gordon & Rooney, 1994; Vess, Moreland, & Schwebel, 1985-86). For example, Gordon and Rooney offered, as one of their suggestions to hospice care-givers, the idea that discovering what part the patient played in the family will help define what is being lost to the family and how the family must compensate. Some commonly observed difficulties involve necessary role changes. For example, male patients are often uncomfortable with their enforced dependence (Cooper, 1994). Family discord can result during the period of adapting to role changes in terms of having to try out new and different behaviors (Geyman, 1983; Paul & Bloom, 1970). Individuals may find it uncomfortable when they must give up behaviors which have defined their functions within the family, just as they may find it awkward to assume behaviors which have not previously been part of their role definition (e.g., a "housewife" having to assume the role of breadwinner). Families sometimes fight

against making necessary changes and exhibit rigidity in the preservation of the old family structure due to the discomfort caused by having to make those changes (Hare-Mustin, 1979).

Emotions have been discussed as they pertain to entire families. Reimlich and Kutscher (1970) observed that, in some instances, whole families would mirror the emotions of a distressed patient (e.g., if the patient was intensely agitated and fearful, the entire family also would exhibit these emotions). Statements have been made that emotional dependency occurs in families in which a member is terminally ill (Wampe, 1975; Stedeford, 1981). Conversely, families have been noted to exhibit detachment and separation behaviors while one of its members is terminally ill (Hackett & Weisman, 1977). It was observed that family members will sometimes avoid contact with the patient or shorten the duration of the contacts while other family members may react in an opposite manner. Both over-involvement and lack of adequate involvement have been observed in families indicating that the issue of closeness, or involvement, is salient.

Related to both the issue of changing structure and involvement is the issue of support within the family. Hackett and Weisman (1977) noted that there is often a lack of support from the family for it's individual member's needs in relation to terminal illness. The need to deal with and make appropriate adjustments to the implications and realities of the illness often goes unsupported by, and is sometimes thwarted by, the

family. For example, Wellisch (1985), in a study of the impact of breast cancer on relationships, wrote about several barriers to support among which were the idea that perceived negative aspects of the illness were not considered appropriate to discuss and the tendency of the patient to "protect" others by avoiding discussions about the ramifications of the illness.

The difficulties involved in open exchanges of messages in families with a dying member were explored by Baidar (1977). Several patterns were illustrated in the case studies presented. First, specific modes of interaction were perceived to serve more as means of avoiding or concealing information than addressing that information by discussing it. Second, the content of communication was limited mainly to discussion of practical needs. Finally, equilibrium within the family system was maintained by the disqualification of any member who conveyed forbidden information; the system imposed definitions of acceptability of only certain types of information. In this latter instance, the patient, in order to comply with the rules created by the family, had to invalidate his/her internal experience and limit communication to approved topics. Whatever expressions of feelings took place were only those sanctioned by the system.

The impact of terminal illness on the family has been found to have repercussions on other systems as well. An example of this is the effect which family reactions have on the manner in which the medical systems and the family deal with one

another. Some of the writers on terminal illness have pointed to the interpersonal relationships between the patient and family members as being important to not only the adjustment of the patient and his/her family, but to the successful implementation of the medical treatment plan as well. Slivkin (1977) outlined the effects of the family system upon the patient and the relevant medical systems and treatment strategies. He commented that the manner in which the systems (e.g., family or hospital) seek to manipulate one another is often not in the best interests of the patient. He cited communication binds between and among systems as being the most common problem resulting from dysfunctional system interaction.

Terminal Illness as a Crisis

It has been established that significant changes or transitions in the family system constitute a crisis and cause disequilibrium within the system. Minuchin (1974) has described some of the behaviors which families exhibit in response to disequilibrium, such as blaming and using guilt-producing tactics on each other. Terminal illness and death in the family are, in this culture, spoken of as crises. Although in most of the literature related to the impact of terminal illness on relationships the situation is termed a crisis, few researchers have addressed the implications of the particular issues under consideration as they related to the nature of human behavior during crises. Although specific behaviors and feelings have been associated with reactions to crises (Janosik, 1984) for the

most part this knowledge has not been integrated within the death-study research. For example, in many articles, essays, and studies where communication behaviors during terminal illness have been addressed, the term "crisis" is frequently used even though there has been no consideration of the effect the crisis nature of the event has on communication behaviors (as well as the effect that terminal illness has on communication behaviors).

Cooper (1984) noted that the true crisis period, the early period following the diagnosis, is poorly recognized in the literature but highly significant when studying the effects of a terminal diagnosis on human relationships. The emphasis has been on the terminal stages instead. Cooper discussed the initial reactions to terminal illness of shock, fear, and depression, which are also common reactions to crisis. Baider (1977) stated that during crisis when the equilibrium and self-perception of the family are at stake, behaviors are performed to attempt to achieve stability, normalize self-perceptions, and achieve equilibrium.

Janosik (1984), in a discussion of crisis counseling as it pertains to terminal illness, emphasized that illness is a crisis and the manner in which a family meets a crisis depends upon how effectively the family was functioning prior to the crisis. She maintained that a crisis brings to the fore and may disclose signs of family fragility. The crisis of terminal illness begins at the time of diagnosis. Family members

question their ability to endure the future as they witness the patient's ordeal. The patient also has fears; those of pain, death, and losing control. Janosik recognized the complications which the developmental stage of a family can impose in the crisis situation. For example, she indicated that cancer during middle age can result in feelings of isolation and futility unless the developmental tasks of middle age have been met. Janosik's purpose in addressing this subject was to offer a method of assessment and crisis intervention appropriate to the situation. She suggested that communication and needs in the family are important areas to assess.

Marital Relationships

Literature pertaining to the marital relationship, change, and adjustment to change was reviewed in order to provide a basis for later discussion of the adjustment to terminal illness. Ways of assessing the marital relationship were also examined for the purpose of providing a framework within which to discuss assessment of that relationship during terminal illness.

Change and Adjustment to Change

In the social learning approach to marital therapy (Stuart, 1980), relationship change is thought to be brought about through reciprocal actions by both spouses which take place in a specific sequence. Changes in boundary conditions (i.e., those conditions which impinge on the marital relationship) also affect the marital relationship. Change is thought

to be a function of the stage of the relationship in that adjustments must be made in response to changes of situation (e.g., from courtship to marriage or when the first child is born). Renegotiation of roles, responsibilities, and new patterns of interaction are called for during these transitions. Changes also occur in response to the personal growth and development of the individual within the marriage. Combs and his associates (Combs, Avila, & Purkey, 1971) maintained that people are motivated to change as they attempt to seek self-fulfillment.

Watzlawick and associates (Watzlawick et al., 1974) identified two types of change in family dynamics: first order change, which has to do with content, and second order change, which has to do with process. First order change can take place without changing the system, whereas second order change alters the system. For example, a couple may change the subject matter of their discussion (a first order change), or they may change the way in which they communicate with each other regarding one of the subject under discussion (a second order change). Two methods of marital relationship change also were discussed by Stuart (1980): the change-first principle and the change-second principle. These principles have to do with whether a particular spouse initiates a change in behavioral interaction or waits to act in response to the initiating behavior of the other spouse.

Watzlawick and Weakland (1977) presented an interactional point of view of change. They maintained that relationship change occurs as a response to tampering with the system. Some change, in the form of family disorganization, occurs in response to rupturing the premise system of the family. Change will be resisted if the homeostasis of the system is threatened. Change is rarely welcomed when it is imminent even though that change may have been sought. Although these observations represent the interactional position concerning change, the remarks were made by these authors as a preface to a discussion of the family systems of schizophrenics.

Watzlawick and Weakland (1977) maintained that small changes generate larger changes (also noted by de Shazer, 1985). They maintained that if all elements of a system react to one another, as well as act as stimuli for one another, a small change may reverberate throughout the system causing other, larger changes to take place. Transitions and happenings of everyday life produce change. Thus, changes brought on by illness and accident sometimes initiate the development of relationship problems as they reverberate in the marital system. This is also the case for normal transitional aspects of family life. All these transitions (changes) were noted by these authors to require major changes in personal relationships.

Stanton (1981) offered a theory of change in which he made two main points: that the whole system may be forced to

reorganize in response to crisis and that there are two kinds of change. The two kinds of change are first order and second order changes as described by Watzlawick, Weakland, and Fisch (1974). Beavers (1985), in a discussion of couples therapy in which he employed a structural-analytic approach to marital therapy, presented change from a developmental perspective of family systems. He stated that families evolve a model for negotiating the ordinary and extraordinary circumstances which befall them. He based these models on three family types: open, closed, and random. The model adopted determines how change will take place. In the random system, change occurs more or less spontaneously; in the closed system, change is more gradual and continuous; and in the open system change may be either gradual or spontaneous depending on family or environmental pressures.

Papp (1983) maintained that change is a dilemma to be resolved. She stated that "change exacts a price and raises the question as to what the repercussions will be for the rest of the system" (p. 11). If one part of the system is altered, according to Papp, repercussions will become evident. Minuchin and Fishman (1981) also discussed the impact that the entrance or exit of one member of a family from the system has on the entire system. Therefore, it may be concluded that the impending loss of a family member necessarily precipitates change in the family system and the marital dyad.

Assessment of the Marital Relationship

In discussing assessment of marital dynamics or characteristics, Stuart (1980) outlined five criteria. First, assessment must be parsimonious. It is not necessary to know the etiology of behaviors. Second, assessment must be multidimensional. The points of view of all involved, including the therapist, are important. Third, assessment should be linked to a theory of intervention. Fourth, assessment must be situation-specific because the manner in which people interact with each other is different under different circumstances and people interact differently in the same situation with different people. Finally, participation in the assessment process must be of value to the couple as an end in itself. Evaluations must be constructive because couples change their behaviors on the basis of evaluations.

Stuart (1980) maintained that boundary conditions (e.g., in-laws or financial pressures) must be assessed since they effect marital interaction. He recommended that assessment of three aspects of marital interaction should be made: frequency, perceived value to the spouses, and impact of the interaction upon the spouses' commitment to each other. Attention has been predominantly directed to the first. He further maintained that the goal of marital assessment is not to explain the origin of the problem but to discover how to deal with it successfully. Assessment must result in the detection of resources for change and areas in need of change. Further, it must include the

context of and the relationship meaning of behaviors for consideration.

When behavioral assessment is applied to dyadic systems (Margolin & Jacobson, 1981) marital relationships are seen as the sum total of the behaviors of both parties. Each person's behavior is both a stimulus and a reinforcement for the behavior of the other. The influence of other theories on behavioral assessment has produced differing views of, and hence assessment techniques for, the marital relationship. First, integrating systems perspective with behavior theory, the marital relationship becomes greater than the sum of its parts. To assess the marital relationship, then, requires more than assessment of each individual. The characteristics of the relationship as a system must be defined. The interactional sequences, seen as overlapping chains of events, are assessed. Each behavior is a stimulus, a response, and a reinforcement in relation to the behavior of the other party within the ongoing interactional sequence. By viewing these interactions as the basic unit of assessment, relationships can be described in terms of their recurring sequences, according to this model.

Margolin and Jacobson (1981) also described the manner in which the marital relationship is seen and assessed according to the way in which behavioral exchange theory and coercion theory have influenced behavioral assessment. According to Margolin and Jacobson, the most common basis for marital assessment comes from behavioral exchange theory in which mutual costs and

rewards in a relationship are the main issues for consideration. The assessment strategy, therefore, focuses on exchanges of positive and negative behaviors in the natural environments in which they take place. Another theoretical influence on marital assessment comes from coercion theory (Patterson & Reid, 1970). According to coercion theory, marital dysfunction is a result of lack of appropriate behavior change skills. Therefore, marital assessment focuses on the problem-solving skills of the couple.

According to Margolin and Jacobson, instruments used to assess the marital relationship generally attend to either content or process. In the first instance, the instruments measure content areas of concern. The instruments which attend to process evaluate the manner in which the couples interact. The examination of process rather than content is based on the assumption that marital problems result from communication deficits rather than specific issues about which the couple communicates.

Gurman and Kniskern (1981), writing from a family therapy perspective, stated that when making assessments of therapeutic changes in marital relationships, attention must be paid to whether the assessment involves mediating goals (i.e., the steps through which clients go to reach an ultimate goal) or ultimate goals (i.e., the final, desired changes). They stated that conclusions cannot be reached concerning the relative efficacy of a type of therapy based on comparison studies of therapeutic

change which fail to address which type of goal attainment has been assessed.

The term "measurement" is used loosely when applied to the manner in which those who write about the marital relationship in association with terminal (or life-threatening) illness have chosen to make assessments. Most researchers who have addressed the marital relationship have done so within the context of a family study or a study of individuals (e.g., patients) (Cooper, 1984; Hampe, 1975). The interview (structured or otherwise) has been the most common assessment technique used in such studies. The typical procedure has been to ask the patient or spouse about the quality of the marital relationship at some point of time relative to the illness and/or death. For example, Hinton (1975) asked spouses of patients about the quality of the marital relationship in regard to depression, anxiety, and anger. Questions also have been asked concerning marital harmony, the identity of the more dominant or subordinate spouse, perceptions concerning "sharing", and perceptions of "closeness" (e.g., Cooper, 1984; Hinton, 1975, 1981).

Checkryn (1984) attempted to establish relationships between response categories on a structured interview, conducted with patients and spouses seperately, and scores on the DAS in an effort to explore the factors impinging upon the marital dyad when there is a recurrence of breast cancer. A relationship was found in only one area. The lowest DAS scores were obtained in the case of spouses who wanted to speak with their mates (i.e.,

the patients) about a particular subject but could not bring themselves to do so. The Checkryn study was designed with more sophistication than most in which researchers either assessed by asking questions such as, "Has the death of your child brought you closer together?" (and if the couple was divorced, the researcher assumed that it had not brought them closer together and did not ask) or by using traditional psychodynamic tools.

Marital Relationship Theory

Within the interactional model, information is the central element. "Human nature" and the social order are seen as being products of communication. Transactions between individuals are primary data for an understanding of this approach. One way to examine communication is to assume that it is based on a code of behaviors and that the participants follow the code (Sluzki & Beavin, 1977).

Although relevant models of communication are not yet systematized into an adequate theory (Sluzki & Beavin, 1977), communication within the interactional model is based on Bateson's theory of communication (Bateson, 1958). In that theory, there are always two orders, or components, present within any interaction: the report and the command. The two components also can be described as information and how this information is to be taken (Watzlawick & Weakland, 1977). The components also can be described as information about objects and information about information (Sluzki & Beavin, 1977), or

the content and relationship aspects of message material present in any communication.

According to interactional theory, the family is a rule governed system, an important factor in understanding the nature of transactions. Members of a system behave among themselves in organized, repetitive manners which shape and maintain relationship agreements (i.e., rules). In every communication, the participants make a statement about the definition of the relationship. Thus, a rule about a particular relationship is actually an inference imposed by an observer in an attempt to describe an area of organized and repetitive behavior.

The creation and implementation of relationship rules lead to the development of norms, another important focus of the theory. Norms are unique for each family and are a "baseline" about which the behavior in a family is evaluated. Homeostatic mechanisms maintain family behavior within the limits allowed by the norms. Just as a rule is a description of an organized, redundant piece of interactional behavior, a norm describes interpersonal relationships but does so more broadly. Values are not norms. Values are used interpersonally to affirm or enforce a norm (Watzlawick & Weakland, 1977).

Roles are seen as cultural, a priori definitions of a person's legal, sexual, or chronological status in the family. The role label defines behaviors expected or forbidden by the culture. As a cultural definition, a role is an individual construct and not an appropriate focus of study within this

model. The investigation of intersctional processes by which behaviors associated with roles are maintained or modified is, however, appropriate.

Changes in the Marital Relationship During Terminal Illness

Several researchers have included discussions of communication within the marital dyad during terminal illness. For example, Stedeford (1981) identified communication problems as one of the causes of failure in coping during terminal illness. Cooper (1984), in a study of the effects of the terminal diagnosis on the married couple, included openness, frequency, and content of communication in the variables under consideration. Openness of communication was found to be affected by the diagnosis; couples reported less openness following the diagnosis than had been experienced prior to the diagnosis. More openness with others also was associated with having been given a small amount of hope (i.e., about the diagnosis). Most spouses did not share their fears, and none of the husbands engaged in this type of "sharing." A discrepancy was found in the reported frequency of communication, with the patients reporting a greater frequency than did these spouses.

Hinton (1981) studied issues in sharing or withholding awareness of impending death between spouses. He found many couples having a member who engaged in denial or in protective behaviors which limited communication. He specifically examined communication about dying, religious beliefs of the patient, anxiety, and depression in relationship to evaluations of the

marriage in terms of how good or bad it was reported to have been. He found that the more certain death appeared to be, the more "sharing" took place. Anxiety was not an important factor. However, people characterized as having been "nervous personalities" engaged in more sharing with their spouses than did those thought to have been "stable." Those who rated their marriages as average were more likely to share awareness of impending death than those in the "good" or "bad" marriage groups. Staff policy concerning the imparting of information about the patient's condition also was found to influence the interactions of the couple concerning the impending death. Hinton found that it is common not to communicate about dying. However, the degree of communication was not related to anxiety or depression. Instead, those who either openly discussed death or said nothing at all were the most comfortable about their communication behaviors. Couples were asked if the fatal illness had drawn them closer. Approximately half (40) said yes to the question, 3 said the relationship had worsened, and the rest (37) reported that the relationship had remained unchanged. Greater communication (about the awareness of death) was not found to improve relationships. However, more couples who reported improvement in their relationships also reported having fully "shared."

Doshan (1985) also studied communication between spouses on the subject of dying in terms of the prevalence of such communication and the relationship between communication and

subsequent adjustment of the surviving spouse. Over half of the subjects had communicated about some aspect of their spouse's dying. Most thought this communication beneficial and subsequently experienced less mood disturbance. One-third of the sample had resisted their partners' attempts to communicate about death and those subjects were found to have greater subsequent mood disturbance.

Although most researchers have relied on the perceptions of the subjects for information and have included statements of conclusion based on those self-reported perceptions, there also have been (recent) instances in which the discrepancy in the perceptions of the spouses was discussed. Studies in which the perceptions of only one spouse were elicited therefore should be examined in a new light. For example, Cooper (1984) found discrepancies between marital partners' degrees of perceived closeness and amount of communication. Similarly, Checkryn (1984) found that in couples where the wife had had a recurrence of breast cancer, it was common for them not to discuss the recurrence. Even when it was discussed, however, the spouses did not share accurately the other's meaning.

The issue of degree of closeness between spouses also has been included in several studies. For example, closeness has been cited as a need of the spouse of the terminally ill person in a hospital setting (Hampe, 1975). Van Wormer (1985), in a study of (guilt) feelings associated with terminal illness, found that subjects experienced an approach/avoidance conflict.

The spouses of the patients felt "sick and tired" of the suffering and helplessness. However, the inner conflict was said to be a source of guilt alleviated only by withdrawing—which in turn caused more guilt. The issue of closeness also has been addressed by Stedeford (1981). First, the terminal spouse desired closeness but was insecure about his/her ability to maintain the interest of the mate. Second, it was found that the patient then sometimes rejected his/her spouse in favor of a close relationship with parents.

The age and gender of the patient and degree of reported marital satisfaction have been examined in regard to variables thought to be associated with adaptive coping in the face of terminal illness (e.g., communication skill). For example, Kubler-Ross found gender and age to be "predictors" of emotional reactions to chronic illness (cited in Viney & Westbrook, 1986-87). Hart (1986-87) also found a gender difference in the degree of stress experienced by families containing a patient undergoing chemotherapy. Females experienced higher degrees of stress than did their male counterparts. It also was concluded that the age and familial position of the dying person in the family were factors influencing the nature of family responses. Cooper (1984) found that male patients were more uncomfortable with "dependent" roles, and that husbands of female patients were less likely to "share" their fears with their spouses than were female spouses of male patients.

Hinton (1975) found that the quality of marital relationships before terminal cancer made a difference in how patients made the adjustment to the illness. The quality of the marital relationship was determined based on reported harmony and reported dominance/subordinance of the patient. Previous marital harmony was significantly associated with "positive" reactions to dying. If the marriage relationship had been reported to have been happy and successful, the patient was found to evidence less depression, anxiety, and anger. In addition, patients who had had a harmonious marital relationship displayed greater acceptance of death.

Summary

In summary, the current literature in the field is predominantly an outgrowth of studies of the emotions and behaviors of terminal patients done in medical settings. The literature in the field of psychological and behavioral reactions to terminal illness is becoming more focused on the interpersonal processes involved now that professional concern has broadened from the individual patient to family and social systems. Communication behaviors between terminal patients and spouses have been examined in several studies. It has generally been indicated that a pattern of open communication between spouses facilitates better subsequent adjustment. Issues of emotional closeness and distance between spouses as well as marital satisfaction have been explored. The degree of closeness has been found to be problematic due to the differing

needs of patients and their spouses at particular times during terminal illness. Marital satisfaction has been found to be associated with better adjustment to terminal illness and also with better postdeath adjustment for spouses. Age and gender of patients have been found to influence these interpersonal behaviors during terminal illness.

CHAPTER III
METHODOLOGY

This study was an examination of aspects of the marital relationships between terminal cancer patients and their spouses. Each marital partner's marital satisfaction and perceived needs were assessed, and marital satisfaction discrepancy was calculated for each couple. Relationships among these factors and demographic and marital system characteristics also were explored. In addition, relationships between marital satisfaction discrepancies and needs were explored.

In this chapter, a discussion of the sampling procedure is followed by a description of the assessment techniques and research procedures used. Next there is a description of the research participants and a discussion of their training. Finally, data analyses and methodological limitations are addressed.

Population

The population of interest consisted of married, adult, terminal cancer patients and their spouses. This study focused on couples in which both spouses were aware of the terminal diagnosis. The research sample was drawn from those who sought treatment from or had been referred to any doctor on the staff of Alschuler General Hospital, the Hematology-Oncology service at

Shands Hospital, and the North Central Florida Hospice all located in Gainesville, Florida, and the Radiation Therapy clinic located in Ocala, Florida.

The practices of the doctors at Alachua General Hospital are typical of practices in North Central Florida that handle terminal cancer patients. Shands Hospital is typical of other large referral hospitals. All hospices follow the same guidelines for accepting patients. Adults of all races and varying socioeconomic statuses are treated in these hospitals and by the North Central Florida Hospice. In general, North Central Florida is not substantially different from other parts of the United States in terms of the kinds of people who are treated or the types of cancer present (H. K. Stechmiller, personal communication, April, 1987).

The sample contained some couples in which the patients were men and some in which they were women. Most of the patients were of middle or old age (i.e., older than 40 years). The sample consisted of 25 couples wherein one spouse had been diagnosed as having terminal cancer.

Sampling Procedure

Couples for inclusion in the study were suggested by doctors on the staff of Alachua General Hospital, the Hematology-Oncology service at Shands Hospital, the Radiation Therapy clinic, and the North Central Florida Hospice. In order to participate in the study, the couple was required to meet the following requirements: (a) the patient had received a

definitive diagnosis of terminal cancer, (b) the spouse had either been present at the diagnosis meeting or had been informed separately by the doctor, (c) the couple was currently living together, and (d) both partners were able to read and comprehend the informed consent form and instruments. Participants were all volunteers. The first 25 patients who met the criteria for the study, volunteered to participate, and completed all interviews formed the sample. Referred couples who did not meet these criteria were excluded from the study.

The researcher obtained permission from the chief of staff at Alachua General Hospital to conduct the study at Alachua General Hospital. Permission also was obtained from the director of the Hematology-Oncology service at Shands Hospital, the director of the North Central Florida Hospice, and the director of Radiation Therapy. Permission for this study also was obtained from the Human Subjects Review Board at the University of Florida and the Institutional Research Review Board at Shands Hospital.

Relevant Variables

The primary variables of interest in this study were the patient's gender and three clusters of relationship variables: (a) marital satisfaction, (b) marital satisfaction discrepancy, and (c) perceptions of couple's needs. The variables were assessed and measured using doctors' records, The Dyadic Adjustment Scale (Spanier, 1976), and the FIRO MATE Scale (Schutz, 1976).

Demographic Variable

The gender of the cancer patient was obtained from doctors' reports (i.e., medical records).

Marital Satisfaction

Marital satisfaction was defined as the mean of the two spouses' scores on the Dyadic Adjustment Scale (DAS) (Spanier, 1976). Marital satisfaction was not considered to be synonomous with life satisfaction or happiness. It pertained only to the couple's perception about how they were relating to each other at that point in time regardless of the degree of satisfaction they had experienced overall in their marriage.

The Dyadic Adjustment Scale (DAS) consists of 32 questions intended for use with married or unmarried cohabitating couples. Responses are made on a Likert-type scale of 0 through 5 for 28 questions, 0 through 4 for 2 questions, and "yes" or "no" for 2 questions. The DAS is coded according to interval continuums ranging from 0 to 1 less than the number of fixed choices, resulting in a total possible score of 151. The scale yields an overall score of adjustment and includes subscales which measure four empirically verified components: (a) dyadic satisfaction, (b) dyadic consensus, (c) dyadic cohesion, and (d) affectional expression.

Spanier (1976) presented evidence in support of the DAS' content, criterion-related, and construct validity. Content validity was established by evaluation of the scale by three judges. Criterion-related validity was established when it was

found that a married sample answered the questions significantly differently from a divorced sample. Construct validity was established when it was found that the DAS was statistically significantly related to the Locke-Wallace Marital Adjustment Scale. The correlation for the total sample was .93 ($p<.001$).

Reliability for the DAS has been calculated for the complete scale as well as for the subscales. Cronbach's Coefficient Alpha was used to measure internal consistency reliability. The total scale reliability thus measured was .96, for the Dyadic Consensus subscale it was .90, for the Dyadic Satisfaction subscale it was .94, for the Dyadic Cohesion subscale it was .86, and for the Affectional Expression subscale it was .73. Spanier (1976) concluded that the total scale and its subscales had sufficientiy high reliability to justify their use for research purposes.

The Dale-Chall readability formula (Dale & Chall, 1948) was applied to the DAS. It was found that the estimated reading level for the entire scale was between 9th and 10th grade level. However, when applying the formula to only the Marital Satisfaction subscale, the estimated reading level was between 7th and 8th grade. The subjects had only that subscale, consisting of 10 items, administered to them.

Marital Satisfaction Discrepancy

Marital satisfaction discrepancy was defined as the difference between a husband's and wife's marital satisfaction scores on the DAS. Low numbers represented high concordance and

high numbers represented greater differences in how spouses reported marital satisfaction.

Perceived Needs

Perceptions of the spouses concerning the other's needs were assessed. The FIRO MATE scale (Schutz, 1976) was used to assess perceptions of needs. It measured the spouses' perceptions of each other in the areas of inclusion (time, attention, interest), control (freedom, autonomy, respect), and affection (love and affection). There are two parts to the MATE scale. Part I is focused on the person's needs in terms of what he/she wants from the mate in the domains of feelings and behavior. Part II is focused on perceptions of the individual concerning what he/she thinks his/her mate wants from him/her in the same two domains. Each of the two parts consists of five scales: inclusion behavior, inclusion feelings, control behavior, control feelings, and affection. There are nine items for each scale. A 6-point, Guttman scaling technique is used, thereby resulting in high internal consistency (Lifton, 1985). Ten scores are obtained for each spouse. Each score can range from 0 through 9. Interpretation of scores requires examination of each partner's scores individually and in combination with the spouse's scores.

Changes in perceptions of needs were assessed by noting the degree of discrepancy between what one spouse stated he/she needed and what his/her spouse perceived those needs to be. For example, in the area of inclusion behavior, an individual

received a score representing his/her needs in that area. The spouse also received a score representing her/his perceptions of the mate's needs in that area. The numerical difference between those scores represented the discrepancy between what one person wanted and what the other person perceived those wants to be. Mean discrepancy scores were obtained for each subscale.

Schutz (1976) has argued that content validity of the MATE is implied due to the Guttman scaling technique and high reproducibility coefficients. Lifton (1985) noted that the scales were designed to represent an operationalization of Schutz's theoretical model of interpersonal relationships. This model is compatible with interpersonal and systems theory. Nonetheless, Lifton (1985) deemed the evidence for criterion-related validity was inconclusive, stated that the weakest aspect of the FIRO Awareness Scales (of which MATE is one) is their construct validity, but wrote that slightly better evidence exists for discriminant validity. He reported that the reliability for the MATE is excellent and concluded that the scales provided useful information about the nature of interpersonal relationships.

The Dale-Chall readability formula (Dale & Chall, 1948) was applied to the MATE scale. A reading level between seventh and eighth grade was estimated for the entire scale.

The Researcher

The researcher holds an M.Ed. in special education and is a doctoral candidate for the Ph.D. in counselor education. In

her work in special education, she was responsible for all testing of various types of students at a residential school for severely emotionally disturbed children. She is practiced in several types of test administration, including that administered during the course of this study. The researcher also has conducted interviews with terminally ill patients of various kinds, including terminal cancer patients and their families. The researcher also received training from an experienced researcher on techniques for interviewing.

Data Collection Procedures

The first contact with the subjects was made in one of two ways. For some, the researcher and one of the doctors met with the subjects (i.e., couple) together and informed them of the study. For others, the doctor or the hospice nurse told the subjects about the study and obtained permission for the researcher to contact them. In either case, the researcher was presented as an associate conducting a study in order to better understand the experience of couples during serious illness. When both the patient and spouse agreed to participate, a meeting time for the collection of data was arranged.

At each data collection meeting, the researcher stated that the purpose of the meeting was to talk with them, ask them some questions, and collect some data. She informed them that their participation in this study had possible benefits for other cancer patients and their families. The study was described as having the general purpose of reaching a better

understanding of what couples experience so that professionals can be of greater assistance to very sick people, particularly those with cancer.

At the second meeting with each couple the researcher asked them to sign the informed consent form (Appendix), subsequent to their having read it and having had their questions answered. The couple was informed that there were two sets of written questions they were to read and answer, and that the researcher would then conduct an interview to obtain their views and feelings about the situation.

Subsequent meetings between the researcher and the subjects took place either in the hospital, the doctor's office, or the home of the couple. After the informed consent form was signed, the instruments were given to both the patient and the spouse, one instrument at a time. The subjects were asked to complete the instruments without discussing their responses with their partners. The interview followed the administration of the instruments. Between 1.0 and 1.5 hours was the maximum length of time needed for this meeting.

Research Questions

This study was an examination of the marital relationship during the terminal illness of one of the spouses. The specific research questions addressed in this study follow.

1. What is the relationship between marital satisfaction and length of time since diagnosis?

2. What is the relationship between marital satisfaction discrepancy and length of time since diagnosis?
3. What is the relationship between marital satisfaction discrepancy and length of time since diagnosis for couples in which the patient is male?
4. What is the relationship between marital satisfaction discrepancy and length of time since diagnosis for couples in which the patient is female?
5. What is the difference in correlation coefficients between marital satisfaction discrepancies for couples in which the patient is male and length of time since diagnosis and marital satisfaction discrepancy for couples in which the patient is female and length of time since diagnosis?
6. What is the relationship of discrepancy between patients' stated needs for inclusion feelings and spouses' perceptions of those patient needs to length of time since diagnosis?
7. What is the relationship of discrepancy between patients' stated needs for inclusion behavior and spouses' perceptions of those patient needs to length of time since diagnosis?
8. What is the relationship of discrepancy between patients' stated needs for control feelings and spouses' perceptions of those patient needs to length of time since diagnosis?

9. What is the relstionship of discrepancy bstwssn patients' ststed needs for control behsvior snd spouses' parceptions of those patient nesds to lsngth of time since diagnosis?

10. Whst is the rslstionship of discrepancy between patisnts' ststed nseds for sffection behavior and spouses' parceptions of thoss patient needs to lsngth of time since disgnosis?

11. Whst is the relstionship of discrepsncy bstwesn sponsss' ststsd needs for inclusion feelings and pstients' percsptions of those sponse needs to lsngth of time since disgnosis?

12. Whst is the relstionship of discrepsncy betwsen spouses' statsd nesds for inclusion behavior and pstients' perceptions of those spouse nseds to length of time since disgnosis?

13. Whst is the relstionship of discrspancy bstwesn spousss' ststed needs for control feelings snd patients' perceptions of those spouse nseds to length of time since diagnosis?

14. Whst is the rslstionship of discrepancy bstwssn spossss' ststsd nseds for oontrol bshsvior snd patients' perceptions of those spouse needs to length of time since disgnosis?

15. Whst is the rslstionship of discrspancy bstwess spouses' ststed needs for sffection behavior and

patients' perceptions of those spouse needs to length of time since diagnosis?

16. What is the difference in correlation coefficients between male patient couples and female patient couples relationships between discrepancy of perceived need and actual need on the part of the patient for inclusion feelings and length of time since diagnosis?

17. What is the difference in correlation coefficients between male patient couples and female patient couples relationships between discrepancy of perceived need and actual need on the part of the patient for inclusion behavior and length of time since diagnosis?

18. What is the difference in correlation coefficients between male patient couples and female patient couples relationships between discrepancy of perceived need and actual need on the part of the patient for control feelings and length of time since diagnosis?

19. What is the difference in correlation coefficients between male patient couples and female patient couples relationships between discrepancy of perceived need and actual need on the part of the patient for control behavior and length of time since diagnosis?

20. What is the difference in correlation coefficients between male patient couples and female patient couples relationships between discrepancy of perceived need and actual need on the part of the patient for affection behavior and length of time since diagnosis?

21. What is the difference in correlation coefficients between male patient couples and female patient couples relationships between discrepancy of perceived need and actual need on the part of the spouse for inclusion feelings and length of time since diagnosis?

22. What is the difference in correlation coefficients between male patient couples and female patient couples relationships between discrepancy of perceived need and actual need on the part of the spouse for inclusion behavior and length of time since diagnosis?

23. What is the difference in correlation coefficients between male patient couples and female patient couples relationships between discrepancy of perceived need and actual need on the part of the spouse for control feelings and length of time since diagnosis?

24. What is the difference in correlation coefficients between male patient couples and female patient

couples relationships between discrepancy of perceived need and actual need on the part of the spouse for control behavior and length of time since diagnosis?

25. What is the difference in correlation coefficients between male patient couples and female patient couples relationships between discrepancy of perceived need and actual need on the part of the spouse for affection behavior and length of time since diagnosis?

26. What is the relationship of marital satisfaction discrepancy to discrepancy between patients' needs in the area of inclusion feelings and spouses perception of those needs?

27. What is the relationship of marital satisfaction discrepancy to discrepancy between patients' needs in the area of inclusion behevior and spouses perception of those needs?

28. What is the relationship of marital satisfaction discrepancy to discrepancy between patients' needs in the area of control feelings and spouses perception of those needs?

29. What is the relationship of marital satisfaction discrepancy to discrepancy between patients' needs in the area of control behavior and spouses perception of those needs?

30. What is the relationship of marital satisfaction discrepancy to discrepancy between patients' needs in the area of affection behavior and spouses perception of those needs?

31. What is the relationship of marital satisfaction discrepancy to discrepancy between spouses' needs in the area of inclusion feelings and patients' perception of those needs?

32. What is the relationship of marital satisfaction discrepancy to discrepancy between spouses' needs in the area of inclusion behavior and patients' perception of those needs?

33. What is the relationship of marital satisfaction discrepancy to discrepancy between spouses' needs in the area of control feelings and patients' perception of those needs?

34. What is the relationship of marital satisfaction discrepancy to discrepancy between spouses' needs in the area of control behavior and patients' perception of those needs?

35. What is the relationship of marital satisfaction discrepancy to discrepancy between spouses' needs in the area of affection behavior and patients' perception of those needs?

Data Analyses

The first research question pertained to the nature of the relationship between marital satisfaction and the length of time since diagnosis. To respond to it, the correlation between the marital satisfaction score for each couple (derived by averaging the DAS scores of the two spouses) and the number of days since the diagnosis was calculated.

The second research question pertained to the relationship between marital satisfaction discrepancy and the length of time since diagnosis. It was addressed through calculation of the correlation between each couple's DAS discrepancy score (i.e., difference between the two spouses' scores) with the number of days since diagnosis.

Research questions #3 and #4 involved the relationship between marital satisfaction discrepancy and days since diagnosis for male patient couples and female patient couples, respectively. Discrepancy scores were obtained by subtracting the patient's DAS marital satisfaction score from the spouse's DAS score. Questions #3 and #4 were answered through computation of the respective discrepancy/length of time correlation coefficients.

Research question #5 was whether the relationship between marital satisfaction discrepancy and time since diagnosis differed as a function of the gender of the patient. This question was addressed through calculation of a test of

significance of difference between correlation coefficients (using Fisher's z transformation).

Research questions #6 through #15 were about relationships between discrepancy scores for the five need areas of the MATE and length of time since diagnosis. A discrepancy score for each need area was obtained by subtracting the patient's Part I score in an area (which indicated the patient's stated need) from the spouse's Part II score in the same area (which indicated the spouses' perception of the patient's need in the area). The discrepancy scores were correlated with days since diagnosis in order to determine the relationships for the respective questions.

Research questions #16 through #20 were focused on the differences in relationships between misperceptions of patients' needs (i.e., discrepancy scores for the need areas of the MATE) and days since diagnosis as a function of the patient's gender. The discrepancy scores were obtained by subtracting the patient's Part I score in each of the five need areas from the spouse's Part II score in the same area. Separate, gender-related correlations between discrepancy scores and days since diagnosis were calculated for the male patient couples and female patient couples, respectively. Tests of significance of difference between correlation coefficients were then computed.

Research questions #21 through #25 involved the differences in relationships of spouse's misperceived needs and days since diagnosis as a function of the patient's gender. These

questions were addressed in the same way as for questions #16 through #20, except that the discrepancy scores of interest reflected the patient's misperceptions of the spouse's needs. They were calculated by subtracting the spouse's Part I MATE score in each need area (which indicated a spouse's self-stated need) from the patient's Part II score in the same area (which indicated what the patient perceived the spouse's need to be in that area). Tests of significance of difference between correlation coefficients were then computed for each area.

Questions #26 through #30 were focused on relationships between misperceived patient's needs and marital satisfaction discrepancy. A discrepancy score for each MATE need area was calculated by subtracting the patient's Part I score in an area from the spouse's Part II score in the same area. The marital discrepancy score was calculated by subtracting the patient's DAS score from the spouse's DAS score. The questions were answered by correlating the discrepancy scores in each of the five need areas with the couple's marital satisfaction discrepancy score.

Questions #31 through #35 were about relationships between misperceived needs of the spouse on the part of the patient and marital satisfaction discrepancy. These questions were answered in a manner similar to that for questions #26 through #30, with the exception of the manner in which the discrepancy scores on the MATE were calculated. For these questions, the spouse's Part I scores were subtracted from the patient's part II scores.

Methodological Limitations

There are several limitations to this study, all of which could affect interpretation and generalizability of the results.

There were several variables (e.g., age, race, socio-economic status, type of cancer, or method of care) which were not used as subject selection criteria. Lack of use of such criteria is attributable to the difficulties in obtaining data from couples in which one partner is terminally ill. Nonetheless, because of the dearth of research on couples in such situations, the data obtained are important. Further, because this study was exploratory in nature, the variables incorporated into the investigation are sufficient given the current professional literature in the area.

It also was possible that a terminal patient and/or spouse made what they considered to be socially desirable responses concerning their behaviors and emotions. For example, most people are loath to admit (except perhaps to their counselors) that they are angry and resentful of the dying "loved one." Because the researcher did not counsel these couples, there was little opportunity to determine if the subjects responded irrespective of social desirability. However, it was presumed that the respondents provided "honest" data.

As with all assessment instruments of the type used in this study, some items may not have been appropriate for particular couples. Further, some items might not have "tapped" the information for which they were designed because of the

nature of the terminal illness situation. Some information also may have been lost because neither marital assessment instrument contained items related to an area of concern to a particular couple. Nonetheless, the instruments used did allow for gathering of comprehensive, valid, and reliable information from the respondents.

CHAPTER IV
RESULTS

Presented in this chapter are analyses of the data from the DAS and MATE scores for married couples in which one of the partners was diagnosed as having terminal cancer. There were 25 couples for which 1 DAS and 10 MATE scores were obtained for each individual. In addition, for each couple, the patient's sex, age, number of years married, and number of days since diagnosis were recorded.

There were 14 male patients and 11 female patients in this study. The ages of the patients ranged from 33 to 78, with a mean age of 61.46. The couples had been married from 7 to 55 years, the mean years married being 30.56. The days since the diagnosis of terminal malignancy ranged from 6 to 2,825. The mean length of time since diagnosis was 275.36 days and its standard deviation was 576.12. It should be noted that the 73-year-old man who had a large cell lymphoma and had survived for 2,625 days since diagnosis, much to the amazement of his doctors, was an unusual case. The next longest survivor had been diagnosed for 737 days. Excluding the 73-year-old man, the mean time since diagnosis was 169.17 days. All members of the sample were Caucasian. All socioeconomic groups appeared to be

represented in the sample, although lower-middle class persons were predominant.

The data obtained for the study are shown in Table 1. Also shown in Table 1 are the discrepancy scores calculated. Each couples' marital satisfaction discrepancy was calculated by subtracting the patient's DAS score from the patient's spouse's DAS score. The DAS Marital Satisfaction subscale is an evaluation of the amount of satisfaction experienced in the relationship. A positive discrepancy score indicated that the spouse of the patient considered the marriage to be more satisfying than did the patient. Conversely, a negative DAS discrepancy score indicated that the patient perceived the marriage as being more satisfying than did his/her spouse. To calculate the discrepancy between stated need and perceived need, the scores for those persons whose stated needs were under consideration (i.e., FIRO MATE Part I scores) were subtracted from the partners' perceived need scores (i.e., FIRO MATE Part II). The FIRO MATE Part I section is designed to identify the relationship needs of the respondent in the areas of inclusion, control, and affection. The FIRO MATE Part II section is intended to identify the respondent's perceptions of his/her spouse's needs in those areas. A positive discrepancy score indicated that the respondent was overestimating his/her spouse's need. A negative discrepancy score indicated that the respondent was underestimating his/her spouses need. For example, if the discrepancy between the patient's need for control behavior and the

Table I

Dyadic Adjustment Scale (DAS) and Fundamental Interpersonal Relations Orientation - Marital ATtitudes Evaluation (FIRO MATE) data for subjects

Patients' Gender	Patient	Spouse	Discrepancy
Females			
1	DAS 42	DAS 47	5
	MATE		
	Ia 6	IIe 1	-5
	Ib 5	IIb 1	-4
	Ic 4	IIc 0	-4
	Id 7	IId 0	-7
	Ie 5	IIe 1	-4
	IIe 8	Ia 6	2
	IIb 8	Ib 7	1
	IIc 6	Ic 1	5
	IId 8	Id 4	4
	IIe 7	Ie 1	6
2	DAS 46	DAS 43	-3
	MATE		
	Ia 2	IIa 0	-2
	Ib 2	IIb 0	-2
	Ic 3	IIc 0	-3
	Id 3	IId 0	-3
	Ie 1	IIe 2	1
	IIe 2	Ia 0	2
	IIb 2	Ib I	1
	IIc 3	Ic 0	3
	IId 3	Id 0	3
	Ile I	Ie 0	1
3	DAS I8	DAS 28	8
	MATE		
	Ia 7	IIa 9	2
	Ib 9	IIb 9	0
	Ic 9	IIc 8	-1
	Id 8	IId 9	1
	Ie 9	IIe 9	0

Table 1--continued

Patient's Gender	Patient		Spouse		Discrepancy
	IIa	7	Ia	5	2
	IIb	8	Ib	8	0
	IIc	9	Ic	9	0
	IId	9	Id	9	0
	IIe	9	Ie	6	3
4	DAS	39	DAS	51	12
	MATE				
	Ia	2	IIa	0	-2
	Ib	2	IIb	0	-2
	Ic	5	IIc	0	-5
	Id	3	IId	1	-2
	Ie	1	IIe	0	-1
	IIa	3	Ia	2	1
	IIb	1	Ib	2	-1
	IIc	5	Ic	0	5
	IId	3	Id	2	1
	IIe	2	Ie	1	1
7	DAS	34	DAS	46	12
	MATE				
	Ia	8	IIa	8	0
	Ib	9	IIb	9	0
	Ic	7	IIc	6	-1
	Id	8	IId	9	1
	Ie	8	IIe	9	1
	IIa	9	Ia	8	1
	IIb	8	Ib	5	3
	IIc	6	Ic	3	3
	IId	8	Id	8	0
	IIe	9	Ie	7	2
8	DAS	42	DAS	47	5
	MATE				
	Ia	3	IIa	9	6
	Ib	5	IIb	9	4
	Ic	5	IIc	9	4
	Id	5	IId	8	3
	Ie	2	IIe	9	7

Table 1—continued

Patients' Gender	Patient		Spouse		Discrepancy
	IIa	3	Ia	8	-5
	IIb	3	Ib	8	-5
	IIc	4	Ic	7	-3
	IId	3	Id	9	-6
	IIa	2	Ie	7	-5
10	DAS	37	DAS	47	10
	MATE				
	Ia	4	IIa	1	-3
	Ib	4	IIb	1	-3
	Ic	3	IIc	0	-3
	Id	3	IId	2	-1
	Ia	3	IIa	1	-2
	IIa	3	Ia	0	3
	IIb	3	Ib	0	3
	IIc	8	Ic	1	7
	IId	4	Id	1	3
	IIe	1	Ia	0	1
12	DAS	44	DAS	39	-5
	MATE				
	Ia	1	IIa	6	5
	Ib	0	IIb	8	8
	Ic	3	IIc	7	4
	Id	2	IId	8	6
	Ie	1	IIe	8	7
	IIa	1	Ia	2	-1
	IIb	2	Ib	0	2
	IIc	2	Ic	4	-2
	IId	0	Id	6	-6
	IIe	1	Ie	1	0
13	DAS	32	DAS	38	6
	MATE				
	Ia	0	IIa	6	6
	Ib	2	IIb	5	3
	Ic	0	IIc	5	5
	Id	1	IId	4	3
	Ie	8	IIa	6	-2

Table 1—continued

Patients' Gender		Patient		Spouse		Discrepancy
		IIe	0	Ie	4	-4
		IIb	3	Ib	5	-2
		IIc	I	Ic	4	-3
		IId	3	Id	5	-2
		IIe	8	Ie	5	3
	16	DAS	38	DAS	39	1
		MATE				
		Ia	2	IIe	3	1
		Ib	2	IIb	I	-1
		Ic	3	IIc	3	0
		Id	2	IId	4	2
		Ie	I	IIe	I	0
		IIe	3	Ie	2	I
		IIb	2	Ib	2	0
		IIc	3	Ic	1	2
		IId	4	Id	1	3
		IIe	3	Ie	0	3
	22	DAS	44	DAS	43	-I
		MATE				
		Ie	2	IIe	5	3
		Ib	0	IIb	7	7
		Ic	0	IIc	5	5
		Id	I	IId	8	7
		Ie	1	IIe	3	2
		IIe	1	Ie	3	-2
		IIb	1	Ib	3	-2
		IIc	4	Ic	2	2
		IId	9	Id	6	3
		IIe	0	Ie	2	-2
Malee						
	5	DAS	43	DAS	39	-4
		MATE				
		Ia	2	IIe	3	I
		Ib	3	IIb	3	0
		Ic	3	IIc	4	1
		Id	6	IId	7	I
		Ie	4	IIe	4	0

Table 1—continued

Patients' Gender	Patient		Spouse		Discrepancy
	IIa	3	Ie	4	-1
	IIb	6	Ib	4	2
	IIc	4	Ic	4	0
	IId	8	Id	4	4
	IIe	3	Ie	3	0
6	DAS	32	DAS	18	-14
	MATE				
	Ie	8	IIe	5	-3
	Ib	8	IIb	7	-1
	Ic	7	IIc	4	-3
	Id	3	IId	4	1
	Ie	8	IIe	8	0
	IIe	8	Ie	4	4
	IIb	8	Ib	4	4
	IIc	4	Ic	0	4
	IId	8	Id	2	6
	IIe	6	Ie	1	5
9	DAS	35	DAS	44	9
	MATE				
	Ia	3	IIe	1	-2
	Ib	4	IIb	0	-4
	Ic	5	IIc	2	-3
	Id	5	IId	3	-2
	Ie	2	IIe	0	-2
	IIe	3	Ia	2	1
	IIb	3	Ib	0	3
	IIc	3	Ic	I	2
	IId	7	Id	2	5
	IIe	4	Ie	1	3
11	DAS	46	DAS	42	-4
	MATE				
	Ia	3	IIe	3	0
	Ib	6	IIb	0	-6
	Ic	3	IIc	0	-3
	Id	6	IId	0	-6
	Ie	5	IIe	0	-5

Table 1—continued

Patients' Gender	Patient		Spouse		Discrepancy
	IIa	3	Ia	3	0
	IIb	7	Ib	0	7
	IIc	5	Ic	1	4
	IId	8	Id	I	7
	IIe	5	Ie	1	4
I4	DAS	47	DAS	45	-2
	MATE				
	Ia	9	IIa	8	-I
	Ib	9	IIb	9	0
	Ic	0	IIc	7	I
	Id	8	IId	8	0
	Ie	9	IIe	9	0
	IIa	8	Ia	8	0
	IIb	9	Ib	9	0
	IIc	9	Ic	7	2
	IId	8	Id	8	0
	IIe	9	Ie	9	0
15	DAS	41	DAS	39	-2
	MATE				
	Ia	1	IIa	1	0
	Ib	2	IIb	0	-2
	Ic	2	IIc	2	0
	Id	2	IId	2	0
	Ie	1	IIe	1	0
	IIa	6	Ia	I	5
	IIb	5	Ib	1	4
	IIc	2	Ic	5	-3
	IId	8	Id	5	3
	IIe	7	Ie	2	5
I7	DAS	44	DAS	48	2
	MATE				
	Ia	5	IIa	5	0
	Ib	6	IIb	5	-1
	Ic	6	IIc	7	1
	Id	6	IId	5	-1
	Ie	5	IIe	8	1

Table 1—continued

Patients' Gender	Patient		Spouse		Discrepancy
	IIa	6	Ia	5	1
	IIb	8	Ib	4	4
	IIc	8	Ic	3	6
	IId	8	Id	4	4
	IIa	8	Ia	7	I
18	DAS	48	DAS	48	0
	MATE				
	Ia	3	IIa	3	0
	Ib	4	IIb	2	-2
	Ic	3	IIc	4	1
	Id	3	IId	3	0
	Ia	I	IIe	1	0
	IIa	3	Ia	3	0
	IIb	4	Ib	2	2
	IIc	4	Ic	4	0
	IId	3	Id	3	0
	IIe	1	Ia	I	0
19	DAS	41	DAS	39	-2
	MATE				
	Ia	3	IIa	3	0
	Ib	3	IIb	3	0
	Ic	0	IIc	3	3
	Id	0	IId	2	2
	Ia	1	IIe	1	0
	IIa	1	Ia	3	-2
	IIb	2	Ib	2	0
	IIc	5	Ic	4	1
	IId	5	Id	4	1
	IIe	4	Ia	2	2
20	DAS	46	DAS	47	1
	MATE				
	Ia	2	IIa	2	0
	Ib	2	IIb	2	0
	Ic	3	IIc	3	0
	Id	3	IId	4	1
	Ie	1	IIa	1	0

Table 1—continued

Patients' Gender	Patient		Spouse		Discrepancy
	IIa	2	Ia	2	0
	IIb	2	Ib	2	0
	IIc	3	Ic	3	0
	IId	3	Id	3	0
	IIe	1	Ie	2	-1
21	DAS	27	DAS	34	7
	MATE				
	Ia	2	IIa	1	-1
	Ib	6	IIb	7	1
	Ic	6	IIc	5	-1
	Id	8	IId	8	0
	Ie	8	IIe	6	-2
	IIa	3	Ia	3	0
	IIb	4	Ib	6	-2
	IIc	6	Ic	4	2
	IId	8	Id	9	-1
	IIe	8	Ie	9	-1
23	DAS	46	DAS	42	-4
	MATE				
	Ia	1	IIa	1	0
	Ib	1	IIb	5	4
	Ic	3	IIc	8	5
	Id	7	IId	3	-4
	Ie	3	IIe	6	3
	IIa	2	Ia	2	0
	IIb	0	Ib	4	-4
	IIc	4	Ic	4	0
	IId	9	Id	3	6
	IIe	0	Ie	1	-1
24	DAS	49	DAS	49	0
	MATE				
	Ia	2	IIa	2	0
	Ib	2	IIb	2	0
	Ic	3	IIc	3	0
	Id	3	IId	3	0
	Ie	1	IIe	1	0

Table 1—continued

Patiente' Gender	Patient		Spouse		Discrepancy
	IIa	2	Ia	2	0
	IIb	2	Ib	2	0
	IIc	3	Ic	3	0
	IId	3	Id	3	0
	IIe	1	Ie	1	0
25	DAS	45	DAS	40	-5
	MATE				
	Ie	2	IIe	6	3
	Ib	2	IIb	2	0
	Ic	3	IIc	5	2
	Id	3	IId	7	4
	Ie	1	IIe	6	5
	IIa	9	Ie	3	6
	IIb	9	Ib	1	8
	IIc	9	Ic	2	7
	IId	8	Id	3	5
	IIe	9	Ie	5	4

Key: PIRO MATE
Needs:
Ie Incleeion behavior
Ib Incluеion feelinge
Ic Control behavior
Id Control feelinga
Ie Affection behavior
Perceived Needs of Spouse:
IIa Incluеion behavior
IIb Inclusion feelinge
IIc Control behavior
IId Control feelinga
IIe Affection behavior

spouse's perception of that need was under consideration, the patient's Part I (c) score, which represented the amount of need the patient had for control behavior, was subtracted from the spouse's Part II (c) score, which represented the spouse's perception of the patient's need for control behavior. If the discrepency score was positive, then the spouse was overestimating the patient's control behavior need, but if it was negative, the need was being underestimated.

For research question #1, the relationship between marital satisfaction and length of time since diagnosis, the correlation between the DAS scores obtained by averaging a couple's two scores and number of days since diagnosis was .16. This correlation was not statistically significant at the .05 level (two-tailed test). The mean of the couples' (average) DAS scores was 40.52, with a standard deviation of 6.51.

For research question #2, the relationship between marital satisfaction discrepancy and number of days since diagnosis, the correlation between differences in couples' DAS scores and days since diagnosis was -.19. This correlation coefficient was not statistically significant at the .05 level. The mean of the couples' DAS discrepancy scores was 1.28, with a standard deviation of 6.31.

For research question #3, the relationship between marital satisfaction discrepancy and length of time since diagnosis for male patients, the correlation between DAS difference scores and

number of days since diagnosis for male patients was -.03, not statistically significant at the .05 level. The mean of the DAS discrepancy scores for male patient couples was -1.29, with a standard deviation of 5.50.

For research question #4, which was similar to question #3 except that it pertained to female patient couples, the correlation between DAS difference scores and number of days since diagnosis was -.36. This correlation was not statistically significant at the .05 level. The mean of the DAS discrepancy scores for female patient couples was 4.55, with a standard deviation of 5.96.

Research question #5 was focused on the differences between female and male patient couples' relationships between marital satisfaction discrepancy and days since diagnosis. A test of significance of difference between independent correlations (using Fisher's r to z transformation) was calculated for the correlations from questions #3 and #4. The z value computed was .73, not statistically significant at the .05 level. The means and standard deviations for male and female patient's DAS difference scores are reported above. The mean days since diagnosis for male patients was 418.64, with a standard deviation of 739.94. The mean days since diagnosis for female patients was 93.00, with a standard deviation of 139.69.

Research questions #6 through #15 involved the relationships between discrepancy scores for the five MATE scales and the length of time since diagnosis. For question #6, the

relationship between the discrepancy between the patient's need for inclusion feelings and the spouses perceptions of that need, a correlation of .34 was found. This correlation was not statistically significant at the .05 level. These inclusion feelings discrepancy scores had a mean of -0.04 and a standard deviation of 3.23.

For question #7, a correlation of .01 between time since diagnosis and discrepancy between patient's need for inclusion behavior and spouse's perception of that need was found. This correlation was not statistically significant at the .05 level. These inclusion behavior discrepancy scores had a mean of 0.36 and a standard deviation of 2.75.

For question #8, a correlation of .16 between time since diagnosis and discrepancies between patients' stated needs for control feelings and spouses' perceptions of those patient needs was found. This correlation was not statistically significant at the .05 level. The control feelings discrepancy scores had a mean of 0.24 and a standard deviation of 3.23.

For question #9, a correlation of .39 was found between time since diagnosis and discrepancies between patients' stated needs for control behavior and spouses' perceptions of those patient needs. This correlation was statistically significant at the .05 level. These control behavior discrepancy scores had a mean of 0.20 and a standard deviation of 2.97.

For question #10, a correlation of .24 between time since diagnosis and discrepancies between patients' stated needs for

affection behavior and spouses' perceptions of these patient needs was found. This correlation was not statistically significant at the .05 level. The affection behavior discrepancy scores had a mean of 0.36 and a standard deviation of 2.84.

For question #11, a correlation of -.35 between time since diagnosis and discrepancies between spouses' stated needs for inclusion feelings and patients' perceptions of those spouse needs was found. This correlation was not statistically significant at the .05 level. These inclusion feelings discrepancy scores had a mean of 1.12 and a standard deviation of 3.06.

For question #12, a correlation of -.08 between time since diagnosis and discrepancies between spouses' stated needs for inclusion behavior and patients' perceptions of those spouse needs was found. This correlation was not statistically significant at the .05 level. These inclusion behavior discrepancy scores had a mean of 0.56 and a standard deviation of 2.47.

For question #13, a correlation of .10 between time since diagnosis and discrepancies between spouses' stated needs for control feelings and patients' perceptions of those spouse needs was found. This correlation was not statistically significant at the .05 level. The mean of these control feelings discrepancy scores was 1.72 and the standard deviation was 3.34.

For question #14, a correlation of -.16 between time since diagnosis and discrepancies between spouses' stated needs for control behavior and patients' perceptions of those spouse needs was found. This correlation was not statistically significant at the .05 level. These control behavior discrepancy scores had a mean of 1.76 and a standard deviation of 2.95.

For question #15, a correlation between time since diagnosis and discrepancies between spouses' stated needs for affection behavior and patients' perceptions of those spouse needs was calculated to be -.33. This correlation was not statistically significant at the .05 level. The mean of these affection behavior discrepancy scores was 1.32 and the standard deviation was 2.44.

Research questions #16 through #20 were in regard to the investigation of relationships between misperceived patient needs and number of days since diagnosis as a function of the patient's gender. Tests of significance of difference between independent correlations were performed.

Question #16 involved the correlation between length of time since diagnosis and discrepancy between actual and perceived need for patient inclusion feelings. The correlation for males was .68 and the correlation for females was .63. The calculated z value was .20, not statistically significant at the .05 level. The mean of the inclusion feelings discrepancy scores for males was -0.79, with a standard deviation of 2.33.

The mean of the inclusion feelings discrepancy scores for females was 0.91, with a standard deviation of 4.04.

Question #17 involved the correlation between length of time since diagnosis and discrepancy between actual and perceived need for patient inclusion behavior. The correlation for males was 0.04 and the correlation for females was .36. The calculated z value was -.71, not statistically significant at the .05 level. The mean of inclusion behevior discrepancy scores for male patients was -.14, with a standard deviation of 1.56. The mean of inclusion behavior discrepancy scores for female patients was 1.00, with a standard deviation of 3.77.

Research question #18 involved the correlation between length of time since diagnosis and discrepancy between actual and perceived need for patient control feelings. The correlation for males was -.33 and the correlation for females was .53. The calculated z value was -2.0, statistically significant at the .05 level. The mean of control feelings discrepancy scores for male patients was -0.28, with a standard deviation of 2.46. The mean of control feelings discrepancy scores for female patients was 0.91, with a standard deviation of 4.04.

Question #19 involved the correlation between length of time since diagnosis and discrepancy between actual and perceived need for patient control behevior. The correlation for males was 0.62 and the correlation for females was 0.40. The calculated z value was 0.63, not statistically significant

at the .05 level. The mean of control behavior discrepancy scores for male patients was 0.29, with a standard deviation of 2.30. The mean of control behavior discrepancy scores for female patients was 0.09, with a standard deviation of 3.78.

Question #20 involved the correlation between length of time since diagnosis and discrepancy between actual and perceived need for patient affection behavior. The correlation for males was 0.38 and the correlation for females was 0.59. The calculated z value was -.60, not statistically significant at the .05 level. The mean of affection behavior discrepancy scores for males was 0.00, with a standard deviation of 2.29. The mean of affection behavior discrepancy scores for females was 0.81, with a standard deviation of 3.49.

Addressed in questions #21 through #25 were the differences between male patient and female patient couples' relationships between time since diagnosis and discrepancy between the stated needs of spouses and the patients' perceptions of those needs.

Question #21 involved a test of significance of difference in correlations between length of time since diagnosis and discrepancy between actual and perceived need of spouse inclusion feelings as a function of the patient's gender. The correlation for males was -.64 and the correlation for females was 0.39. The z value computed was -2.52. This z value was statistically significant at the .01 level. The mean of inclusion feelings discrepancy scores for males was 2.00, with a

standard deviation of 3.31. The mean of inclusion feelings discrepancy scores for females was 0.00, with a standard deviation of 2.41.

Question #22 involved a test of significance of difference in correlations between length of time since diagnosis and discrepancy between actual and perceived need of spouse inclusion behavior as a function of the patient's gender. The correlation for males was -.19 and the correlation for females was -.15. The z value computed was -.09, not statistically significant at the .05 level. The mean inclusion behavior discrepancy score for male patients was 1.00, with a standard deviation of 2.32. The mean inclusion behavior discrepancy score for female patients was 0.00, with a standard deviation of 2.65.

Question #23 involved a test of significance of difference in correlations between length of time since diagnosis and discrepancy between actual and perceived need of spouse control feelings as a function of the patient's gender. The correlation for males was 0.07 and the correlation for females was -.55. The z value computed was 1.49, not statistically significant at the .05 level. The mean of control feelings discrepancy scores for male patients was 2.86, with a standard deviation of 2.77. The mean of control feelings discrepancy scores for female patients was 0.27, with a standard deviation of 3.58.

Question #24 involved a test of significance of difference in correlations between length of time since diagnosis and

discrepancies between actual and perceived need of spouse control behavior as a function of the patient's gender. The correlation for males was -.20 and the correlation for females was -.20. The z value computed was 0.19, not significant at the .05 level. The mean of control behavior discrepancy scores for male patients was 1.79, with a standard deviation of 2.69. The mean of control behavior discrepancy scores for female patients was 1.73, with a standard deviation of 3.30.

Question #25 involved a test of significance of difference in correlations between length of time since diagnosis and discrepancies between actual and perceived need of spouse affection behavior as a function of the patient's gender. The correlation for males was -.51 and the correlation for females was -.20. The z value computed was -.76, not significant at the .05 level. The mean of affection behavior discrepancy scores for males was 1.50, with a standard deviation of 2.28. The mean of affection behavior discrepancy scores for females was 1.09, with a standard deviation of 2.74.

Questions #26 through #30 dealt with relationships between misperceived patient needs and marital satisfaction discrepancy. As stated earlier, the mean of DAS differences was 1.20, with a standard deviation of 6.31. The means and standard deviations for all MATE discrepancy scores also have been reported (i.e., for questions #6 through #15).

For question #26, a correlation of -.18 between DAS differences and discrepancies between actual and perceived

patients' needs for inclusion of feelings was found. This correlation was not statistically significant at the .05 level.

For question #27, a correlation of -.09 between DAS differences and discrepancies between actual and perceived patients' needs for inclusion behavior was found. This correlation was not statistically significant at the .05 level.

For question #28, a correlation of -.15 between the DAS differences and discrepancies between actual and perceived patients' needs for control feelings was found. This correlation was not statistically significant at the .05 level.

For question #29, a correlation of -.28 between DAS differences and discrepancies between actual and perceived patients' needs for control behavior was found. This correlation was not statistically significant at the .05 level.

For question #30, a correlation of -.28 between DAS differences and discrepancies between actual and perceived patients' needs for affection behavior was found. This correlation was not statistically significant at the .05 level.

Questions #31 through #35 were focused on relationships between misperceived spouse needs and marital satisfaction discrepancy.

For question #31, a correlation of -.26 between DAS differences and discrepancies between actual and perceived spouses' needs for inclusion of feelings was found. This correlation was not statistically significant at the .05 level.

For question #32, a correlation of -.15 between DAS differences and discrepencies between actual and perceived spouses' needs for inclusion behavior was found. This correlation was not statistically significant at the .05 level.

For question #33, a correlation of -.29 between DAS differences and discrepancies between actual and perceived spouses' needs for control feelings was found. This correlation was not statistically significant at the .05 level.

For question #34, a correlation of .10 between DAS differences and discrepencies between actual and perceived spouses' needs for control behavior was found. This correlation was not statistically significant at the .05 level.

Finally, for question #35, a correlation of -.11 between DAS differences and discrepancies between actual and perceived spouses' needs for affection behavior was found. This correlation was not statistically significant at the .05 level.

CHAPTER V
DISCUSSION

Contained in this chapter are discussions of the limitations for generalizability of the results; interpretations, evaluations, and implications of the results; recommendations; and a concluding summary of the study.

Generalizability Limitations

The generalizability of the results of this study is limited by the sampling procedures used to population of similar adult, terminally ill, cancer patients and their spouses. Although generalizability from research done in medical settings often is claimed from nonrandom samples, the results of this study are not generalizable to the broad population of cancer patients and spouses. Instead, possible behavioral trends are suggested which can be examined in subsequent research using broader-based samples.

Couples who consented to participate in the study also may have had some differentiating characteristics which separated them from those couples who did not consent. Also, in cases where a patient became too sick to complete the assessment or in fact died before completing it, information may have been lost concerning changes in their relationships.

Evaluation of Research Questions

The relationship between couples' marital satisfaction and length of time since diagnosis was not significant. Relationships between marital satisfaction discrepancy and length of time since diagnosis also were not significant for the entire sample, the group of male patient couples, and the group of female patient couples.

Relationships between misperception of patient and spouse needs and length of time since diagnosis were not significant for the sample as a whole with the exception of one need area: misperceived needs of the patient for control behavior. That correlation coefficient was .39, indicating a significant, progressive, overestimation of patients' needs for control behavior on the part of their spouses.

When the relationship between misperception of patient needs and length of time since diagnosis was examined relative to the gender of the patient, only one area of need, control feelings, had significant differences between male and female patient couples. For male patient couples, the correlation coefficient was -.33, indicating a progressive, but nonsignificant underestimation of the need for control feelings of male patients. For female patients, however, a correlation coefficient of .53 indicated an overestimation on the part of the husbands of female patients of the patients' need for control feelings. There was a significant difference between the correlations for the two groups.

Specifically addressed in the research questions were differences between male patient and female patient couples in terms of determining if there was a relationship between misperception of needs and length of time since diagnosis. However, an interesting byproduct of the data analyses for these questions was the independent correlations for misperceptions and time since diagnosis for the gender groups. For example, although there was no difference between the patient gender groups when the relationship between misperception of patient inclusion feelings and length of time since diagnosis was examined, both gender groups obtained significant positive correlations. The male group had a correlation coefficient of .68 (significant at the .01 level) and the female group had a correlation coefficient of .63 (significant at the .05 level). Therefore, both the female and male patient groups had progressive overestimations by the spouses of the patients' need for inclusion feelings.

Similarly, although there was no significant difference between gender groups for misperception of patient needs for control behavior relative to length of time since diagnosis, the male patient group had a statistically significant correlation coefficient of .62. The female patient group had a nonsignificant correlation coefficient of .40. Thus, although the difference between gender groups was not significant, the relationship between misperception of patient need for control behavior and time since diagnosis for male patient couples was

significant. Therefore, the wives of the male patients progressively overestimated their husbands' needs for control behavior.

Much the same situation exists regarding the relationship between misperception of patient need for affection behavior and length of time since diagnosis relative to the gender of the patient. Although there was no significant difference between the patient gender groups, there was a significant correlation between misperception of female patient affection behavior needs and length of time since diagnosis. The correlation coefficient was .59, indicating a progressive overestimation by husbands of the female patients' needs for affection behavior.

Significant differences between male patient couples and female patient couples were found in one area pertaining to the relationship between misperception of spouse needs and length of time since diagnosis. The area of significant difference was that of inclusion feelings. For misperception of spouse inclusion feeling needs, the correlation between the discrepancy scores and length of time since diagnosis for male patients was -.64, significant at the .05 level. For female patient couples, the nonsignificant correlation coefficient was .39. Therefore, the male patients were significantly underestimating their wives need for inclusion feelings as time passed after diagnosis, and the difference between the patient gender groups regarding the manner in which spouses needs for inclusion feelings were misperceived over time was significant.

No significant relationships were found between either the misperception of patient needs and marital satisfaction discrepancy or misperception of spouse needs and marital satisfaction discrepency.

Interpretations

There were no significant relationships between marital satisfaction and length of time since diagnosis, between marital satisfaction discrepancy and length of time since diagnosis, or between marital satisfaction discrepancy and misperception of patient of spouse needs. Marital satisfaction appeared to be a stable entity, relatively unaffected by the diagnosis of terminal cancer, progress of the disease, or discrepancies between one partner's needs and the spouse's perception of those needs. The sample was comprised of couples who had been married an average of 30.6 years and therefore were presumably established in their relationships. It follows that if the couples were experiencing relationship satisfaction prior to the diagnosis, the satisfaction continued after diagnosis despite the hardships encountered as a result of the disease, and despite relatively minor inaccuracies in perceiving one another's needs during the time of illness.

The findings relative to the issue of control merit specific discussion. Regarding misperception of patient needs for control behavior, the sample as a whole overestimated patients' needs in that area as time since diagnosis increased. In addition, when patient gender groups were examined

separately, it was found that wives of male patients also overestimated. It may be that since most people in medical settings state that the patients (particularly men) need to be able to exhibit control during illness, and since most popular literature on various illnesses imparts that same perspective, spouses were overestimating the patients' need for such behavior. It also could be that the spouses wished that the patients had more control over their circumstances and felt that a desire on the part of the patients for such control would be normal.

In findings relative to misperception of the patients' need for inclusion feelings, statistical significance was not achieved for the group as a whole. However, when the sample was grouped according to patient gender, both male patient couples and female patient couples showed significant relationships between overestimation of patients' needs for inclusion feelings and length of time since diagnosis. As time progresses during terminal illness, patients have less desire for inclusion and emotionally separate from loved ones (Kubler-Ross, 1974), a situation that families do not readily accept. This could be the reason for overestimations of patients' need for inclusion feelings. Conversely, male patients progressively underestimated their wives' needs for inclusion feelings. It could be that as the male patients' needs in the area of inclusion feelings decreases, they are unaware that their wives' needs do not. Because this was the only area in which significance was reached regarding misperception of spouse needs in relation to

time since diagnosis, generally there was no relationship between misperception of spouses' needs and length of time since diagnosis. Therefore patients' needs are only slightly more misperceived over time than are spouse needs. In situations similar to those investigated in this study, the focus is usually on the needs of the patient. Spouses often may have preconceived notions about what those needs are, whereas patients usually operate without "benefit" of outside information when assessing the needs of their spouses. This could be an explanation for the overestimation of female patients' needs for affection by their husbands. The patients could be in a process of decathexis but the husbands may be responding to a socially stereotypic image of the female patient who needs much affection. Another explanation could be that these husbands may have felt they were not able to give their wives as much as they needed and thereby overestimated the needs.

Gender-based differences were found relative to misperception of patient needs in the area of control feelings as a function of time passed after diagnosis. Control is a gender-related issue (Checkrym, 1984; Cooper, 1984) so this finding is not surprising. Interpretation of these differences between the gender groups rests on the idea that men and women perceive control feeling needs differently in each other. This is a broader statement than should be made relative to the gender differences found for the relationship between misperception

of spouse inclusion feelings and time since diagnosis. It is important to note, however, that male and female patient couples differed significantly in their relationships between misperceived spouse needs for inclusion feelings and length of time since diagnosis. Also, the differences were in opposite directions; male patients progressively underestimated their wives' needs.

Implications

There are several implications of this study for counselors and other professionals concerned with the psychosocial aspects of terminal illness. First, there is nothing in the results of this study to indicate that the diagnosis of terminal cancer has any major effect on marital satisfaction. Despite all the hardships terminal illness imposes on patients and their spouses, counselors should not assume that the hardships have either a deleterious or a salubrious effect on the couples' relationship over time. This leaves counselors free to concentrate on facilitating changes which may lessen the difficulties for the individuals involved rather than acting on the assumption that the terminal illness itself is harmful or helpful to the couples' relationship.

A connection between marital satisfaction discrepancy and misperception of needs also was not found in this study. The implication is that despite the fact that needs are sometimes misunderstood, apparently there is no relationship between the misunderstandings and perceptions of marital satisfaction. This

seems to indicate that perceptions of marital satisfaction are unrelated to perceptions of needs. Therefore counselors can assume that in cases where couples are failing to perceive accurately each others' needs, the misperception is not related to marital satisfaction. Professionals need not assume that because there may be growing lack of understanding of needs present in a relationship, there is a concomitant increasing discrepancy in how the spouses view their marriage.

If counselors are aware that the needs for control feelings are perceived differently by man and women as illness progresses, they can help couples more accurately understand each others' needs during the course of the illness. Similarly, if they recognize that spouses' needs for inclusion feelings are perceived differently depending upon whether the patient is a man or woman, they can be more helpful in facilitating better understandings of the needs.

Recommendations

Future research on couples in which one person is terminally ill should be designed to explore the nature of some variables that were present but not addressed in this study. For example, ages of the patients and of their spouses, number of years the couples had been married, number of children in the family, whether it was a first or second (or greater) marriage for the patients or spouses, and other demographic factors possibly related to marital satisfaction all should be studied.

The interviews conducted following completion of administration of instruments yielded subjective information concerning couples' perceptions of their coping skills, communication patterns, strengths as a couple, concerns about relationships, and the situations in which these couples found themselves. Interview data were not included as part of the study. Rather, the interviews were intended to ascertain whether participation in the study had raised issues which the couple needed to address. A second purpose of the interviews was to make participation in the research process less impersonal. Irrespective of these purposes, it was found that the couples had many topics of concern about which they wanted to talk. In general, these topics were other than those addressed by the assessment instruments used in the study. Therefore, the use of structured interviews in future research on similar couples is strongly recommended. Although there is greater danger of obtaining invalid data from interviews, there also is greater opportunity to address topics not typically assessed in paper-and-pencil instruments. Therefore, the benefits of interview methodology may outweigh the disadvantages.

Finally, it would be of interest to conduct the same study with greater control, if one had the means to do so, in order to ascertain whether the results of this study are similar to that which might be obtained with a representative sample.

Summary

The major finding of this study was that marital satisfaction is stable over time following a diagnosis of terminal cancer. Average marital satisfaction did not change significantly over time and neither did the discrepancy between the degree of satisfaction perceived by each spouse. Therefore, it can be assumed that marital satisfaction remains about the same after diagnosis and during terminal illness as before diagnosis. The stability of marital satisfaction apparently contradicts frequent reports from couples that the "illness brought them closer together." However, this statement is (almost) a cultural tradition and may not reflect the true feelings of the persons involved.

In regard to how patient gender relates to misperception of needs and length of time since diagnosis, it was found that there were significant differences between patient gender groups for misperception of patient need for control feelings. In addition, a difference was found between patient groups for misperception of spouse need for inclusion feelings. None of the other needs misperception areas were found to be affected by the gender of the patient as the illness progressed. When the sample was considered as a whole, no significant relationships were found between misperception of patient or spouse needs and length of time since diagnosis, with one exception: patients' need for control behavior. Patients' needs for control behavior are significantly overestimated by spouses as time passes.

When the sample was divided into groups by patient gender in order to examine relationships between misperception of patient and spouse needs and length of time since diagnosis, several relationships were statistically significant. For both male patient couples and female patient couples, patient need for inclusion feelings was overestimated by spouses. For the male patient group, patients' need for control behavior was overestimated. For female patient couples, patients' need for affection was overestimated. Finally, for male patient couples, spouses' need for inclusion feelings was underestimated.

When the relationship between marital satisfaction discrepancy and misperceived patient and spouse needs was examined, it was found that no significant relationships existed in any of the patient or spouse need areas.

APPENDIX

INFORMED CONSENT

Informed Consent

Subjects' Names (husband)_____
(wife)_____
Subjects' Address_____
Project Title: The experience of couples during serious illness.
Principal Investigator: M. Meredith Johnson, Counselor Education Department, University of Florida, 392-0731

I agree to participate in the research as explained below:

The aim of this study is to better understand the experience of couples during a time of serious illness. The information collected will be used to develop better ways in which health-care professionals can assist couples in these situations. The names of those who take part in this study will not be included in any report. To participate in this study, you will need to do the following:

Complete two pencil and paper forms that ask about your views of your marriage.

Please feel free to ask any questions which you may have at this time.

The above stated nature and purpose of this research, including discomforts, and risks involved (if any) have been explained to me. Furthermore, I understand that this investigation may be used for educational purposes which may include publication. I also understand that I may withdraw my consent at any time without prejudice.

This information will be kept confidential within legal limits (or to the extent provided by law).

I have read, and I understand the procedure described above. I agree to participate in the procedure and I have received a copy of this description.

Signed (husband)_____
(wife)_____

I have defined and explained fully this research to the participant whose signature appears above.

Signed _____

REFERENCES

Ackerman, N. W. (1966). Treating the troubled family. New York: Basic Books.

Balder, L. (1977). The silent message--communication in a family with a dying patient. Journal of Marriage and Family Counseling, 3, 23-28.

Bateson, G. (1958). Naven (2nd ed.). Stanford, CA: Stanford University Press.

Beavers, W. R. (1985). Marital therapy in a family plagued with physical illness. In A. S. Gorman (Ed.), Casebook of marital therapy (pp. 177-198). New York: Guilford Press.

Beck, A., Rush, J., Shaw, B., & Emergy, G. (1979). Cognitive therapy of depression. New York: Guilford Press.

Binger, C. M. (1984). Psychological intervention with the child cancer patient and family. Psychosomatics, 25, 899-902.

Bowen, M. (1979). Family reactions to death. In M. Bowen (Ed.), Family therapy and clinical practice (pp. 321-336). New York: Aaronson Press.

Checkryn, J. (1984). Cancer recurrence: Personal meaning, communication, and marital adjustment. Cancer Nursing, 7, 491-498.

Combs, A. W., Avila, D. L., & Purkey, W. W. (1971). Helping relationships: Basic concepts for the helping professions. Boston: Allyn and Bacon.

Cooper, S. T. (1984). A pilot study on the effects of the diagnosis of lung cancer on family relationships. Cancer Nursing, 7, 301-308.

Dale, E., & Chall, J. S. (1948). A formula for prediction readability: Instruction. Educational Research Bulletin, 27, 37-54.

de Shazer, S. (1985). Key solutions in brief therapy. New York: W. W. Norton.

Doshan, T. (1985). Communication about dying between terminally ill people and their spouses (Doctoral dissertation, University of Iowa, 1984). Dissertation Abstracts International, 46, 2049B.

Freud, S. (1957). Mourning and melancholia. In J. Strachey (Ed.), The standard edition of the complete psychological works of Sigmund Freud (Vol 14, pp. 243-259). London: Hogarth Press and Institute for Psychoanalytics. (Original work published 1917)

Geyman, J. P. (1983). Dying and death of a family member. The Journal of Family Practice, 17, 125-134.

Gordon, A., & Rooney, A. (1984). Hospice and the family: A systems approach to assessment. The American Journal of Hospice Care, 1, 31-33.

Gullo, S. V. (1984). A study of selected psychological, psychosomatic, and somatic reactions of women anticipating the death of a husband (Doctoral dissertation, Columbia University, 1983). Dissertation Abstracts International, 35, 5113B.

Gurman, A. S., & Kniskern D. P. (1981). Family therapy outcome research: Knowns and unknowns. In A. S. Gurman & D. P. Kniskern (Eds.), Handbook of Family Therapy (pp. 742-775). New York: Brunner/Mazel.

Hacket, T. P., & Weisman, A. D. (1977). Reactions to the imminence of death. In A. Monat & R. S. Lazarus (Eds.), Stress and coping: An anthology (pp. 324-333). New York: Columbia Univ. Press.

Haley, J. (1963). Marriage therapy. The Archives of General Psychiatry, 8, 213-234.

Hampe, S. O. (1975). Needs of the grieving spouse in a hospital setting. Nursing Research, 24, 113-120.

Hare-Mustin, R. (1979). Family therapy following the death of a child. Journal of Marital and Family Therapy, 5, 51-59.

Hart, K. (1986-87). Stress encountered by significant others of cancer patients receiving chemotherapy. Omega, 17, 151-167.

Heimlich, H. J., & Kutscher, A. H. (1970). The family's reaction to terminal illness. In H. C. Schoenberg, D. Peretz, & A. H. Kutscher (Eds.), Loss and grief: Psychological management in medical practice (pp. 270-279). New York: Columbia Univ. Press.

Hinton, J. (1975). The influence of previous personality on reactions to having terminal cancer. Omega, 6, 95-111.

Hinton, J. (1981). Sharing or withholding awareness of dying between husband and wife. Journal of Psychosomatic Research, 25, 337-343.

Jackson, D. D. (1968). Therapy, communication and change: Human Communication (Vol. 1). Palo Alto, CA: Science and Behavior Books.

Janoski, E. (1984). Crisis counseling: A contemporary approach. Monterey, CA: Wadsworth, Inc.

Johnson, R. I., Schalekamp, M., & Garrison, L. (1956). Communication: Handling ideas effectively. New York: McGraw-Hill.

Kubler-Ross, E. (1974). On death and dying. New York: Macmillan.

Kubler-Kose, H. (Speaker). (1975). Death: Its psychology [Caesett Recording]. New York: CBS.

Lifton, F. D. (1995). Review of the FIRO awareness scales. In J. V. Mitchell, Jr. (Ed.), The ninth mental measurements yearbook, (Vol. 1, pp. 577-579). Lincoln, NE: Univ. of Nebraska Press.

Margolin, G., & Jacobson, N. S. (1991). Assessment of marital dysfunction. In M. Hersen, & A. S. Bellack (Eds.), Behavioral assessment: A practical handbook (2nd ed., pp. 389-426). Elmsford, NY: Pergamon Press.

Minuchin, S. (1974). Families and family therapy. Cambridge, MA: Harvard Univ. Press.

Minuchin, S., & Fishman, H. C. (1981). Family therapy techniques. Cambridge, MA: Harvard Univ. Press.

Moos, R. H., & Tsu, V. D. (1977). The crisis of physical illness: An overview. In R. H. Moos (Ed.), Coping with physical illness (pp. 3-21). New York: Plenum Medical.

Haysmith, A., Hinton, M., Meredith, R., Marks, M. D., & Barry, R. J. (1983). Surviving malignant disease: Psychological and family aspects. British Journal of Hospital Medicine, 30, 26-27.

Papp, P. (1983). The process of change. New York: Guilford Press.

Parsons, T. (1951). The social system. Glencoe, IL.: The Free Press.

Persons, T. (1964). Social structure and personality. London: Collier-Macmillan.

Persons, T. (1975). The sick role and the role of the physician reconsidered. Milbank Memorial Fund Quarterly, 53, 257-258.

Patterson, G. R., & Reid, J. B. (1970). Reciprocity and coercion: Two facets of social systems. In C. Neuringer & J. L. Michael (Eds.), Behavior modification in clinical psychology (pp. 133-177). New York: Appleton-Century-Crofts.

Paul, N. L., & Bloom, J. D. (1970). Multiple-family therapy: Secrets and scapegoating in family crisis. International Journal of Group Psychotherapy, 20, 37-47.

Ramsey, R. W. (1979). Bereavement: A behavioral treatment of pathological grief. In P. O. Sloman, S. Bates, & W. S. Dorkens, III (Eds.), Trends in behavior therapy (pp. 217-248). New York: Academic Press.

Rarbin, T. R. (1954). Role theory. In G. Lindzey (Ed.), Handbook of social psychology (Vol. I, pp. 223-258). Reading, MA: Addison-Wesley.

Schutz, W. (1976). MATE: A FIRO awareness scale (revised). Palo Alto, CA: Consulting Psychologists Press.

Selvini-Pallazzoli, M., Cecchin, G., Prata, G., & Boscolo, L. (1978). Paradox and counterparadox. New York: Aronson Press.

Silvkin, S. B. (1977). Death and living: A family therapy approach. The American Journal of Psychoanalysis, 37, 317-324.

Sluzki, C. E., & Beavin, J. (1977). Symmetry and complimentarity: An operational definition and a typology of dyads. In P. Watzlawick & J. B. Weakland (Eds. and Trans.), The

interactional view (pp. 71-87). New York: Norton. (Reprinted from Acta Psiquiatrica y Psicologica de America Latina, 1965, 11, 321-330.)

Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. Journal of Marriage and the Family, 38, 15-28.

Stanton, M. D. (1981). Marital therapy from a structural/strategic viewpoint. In G. P. Sholevar (Ed.), The handbook of marriage and marital therapy (pp. 303-334). New York: Spectrum.

Stadeford, A. (1981). Couples facing death: 1-Psychosocial aspects. British Medical Journal, 283, 1033-1036.

Stephenson, J. S. (1981). The family therapist and death: A profile. Family Relations, 30, 459-462.

Stoter, D. (1980). Death, the child and his family: The role of chaplain. Nursing Times, 76, 7.

Stuart, R. B. (1980). Helping couples change: A social learning approach to marital therapy. New York: The Guilford Press.

Thibaut, J. W., & Kelley, H. H. (1959). The social psychology of groups. New York: John Wiley and Sons.

van Wormer, K. (1985). Guilt feelings in the spouse of the terminally ill. Home Healthcare Nurse, 3, 21-25.

Voss, J., Moreland, J., & Schwebel, A. I. (1985-86). Understanding family role reallocation following a death: A theoretical framework. Omega, 16, 115-128.

Viney, L. L., & Westbrook, M. (1986-87). Is there a pattern of psychological reactions to chronic illness which is associated with death. Omega, 17, 169-181.

von Bertalanffy, L. (1950). An outline of general systems theory. British Journal of Philosophy of Science, 1, 134-165.

Watzlawick, P., & Weakland, J. H. (Eds.). (1977). The interactional view: Studies at the Mental Research Institute, Palo Alto, 1965-1974. New York: W. W. Norton.

Watzlawick, P., Weakland, J. H., & Fisch, R. (1974). Change: Principles of problem formation and problem resolution. New York: George Braziller.

Weisman, A. (1972). On dying and denying: A psychiatric study of terminality. New York: Behavioral Publication.

Wellisch, D. (1985). The psychological impact of breast cancer on relationships. Seminars in Oncology Nursing, 1, 195-199.

Zucker, A. (1999). The right to die: Ethical and medical issues. In H. Wass, F. M. Berardo, & R. M. Neimeyer (Eds.), Dying: Facing the facts (2nd ed., pp. 323-344). New York: Hemisphere/Harper & Row.

BIOGRAPHICAL SKETCH

M. Meredith Johnson was born December 4, 1942, in Columbia, Missouri, to Drs. Irmgard and Roy Ivan Johnson. Meredith attended P.K. Yonge High School in Gainesville, Florida. She received a B.A. degree in English from the University of Florida in 1966. She studied German and music in Salzburg, Austria, in 1962 at the University of Salzburg and the Mozarteum. Meredith received an M.Ed. degree in special education from the University of Delaware in 1977. She has worked with deaf children, emotionally disturbed children, and socially maladjusted children. She was responsible for all academic testing and evaluation at the Devereux Glenholme School, a residential facility for severely socially and emotionally maladjusted children. She entered the Ph.D. program in the Department of Counselor Education at the University of Florida in the fall of 1983. Meredith has done internships with North Central Florida Hospice and with Gainesville Hematology and Oncology. She has also been a hospice volunteer. She was a co-developer and co-leader of the Hospice Bereavement Group. Meredith hopes to continue to be involved with hematology and oncology services after graduation. She is married with two children.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Larry C. Loesch

Larry Loesch, Chair
Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Janet Larsen
Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Harold Riker
Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Harry B. Shaw

Harry Shaw
Associate Professor of English

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

April, 1988

Harold C. Smith (N)
Dean, College of Education

Dean, Graduate School